Equity Research

December 16, 2020

BSE Sensex: 46263

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Sector update

Oil & Gas and Petrochemicals

GSPL (BUY)
Target price: Rs297

GGL (BUY)
Target price: Rs442

IOCL (ADD)
Target price: Rs105

GAIL (HOLD)
Target price: Rs129

PLNG (HOLD)
Target price: Rs256

MGL (REDUCE)
Target price: Rs925

IGL (SELL)
Target price: Rs378

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INDIA

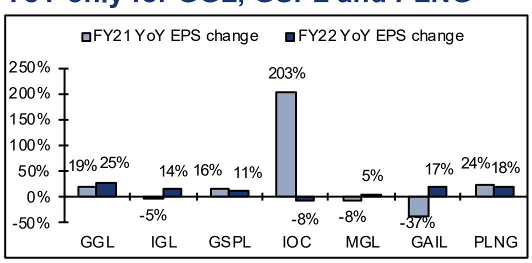
Oil & Gas update

Outlook 2021: Vaccines to drive oil, LNG & GRM up YoY

Vaccine-driven demand recovery is likely to boost GRMs, oil and spot LNG, but hit Henry Hub prices and marketing margins. This augurs well for GAIL's H2FY21E-FY22E gas marketing and earnings outlook *vs* its poor showing in H1FY21. IOC's FY21E EPS would surge driven by marketing margins and inventory gains. Its reported FY22E EPS is estimated to fall (no inventory gains), but core EPS to rise YoY. FY21E-FY22E EPS of only GGL, GSPL and PLNG, whose volumes are back to pre-lockdown levels, are estimated to be up YoY. GGL is our top pick in CGD given its strong EPS and volume growth and as it is likely to be the least hit by competition. IGL and MGL are more vulnerable to competition though its impact may not be as severe as earlier thought and be visible only after some time.

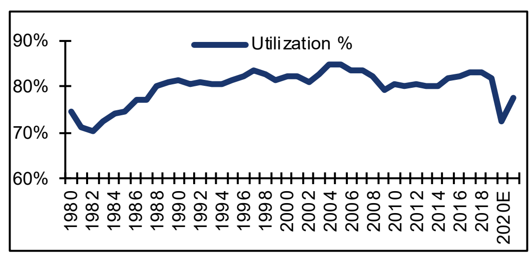
- **GGL and GSPL top picks:** Notification of regulations allowing competition, OMCs demanding 90-100% rise in commission on CNG sold from their sites, and likely rise in domestic gas prices (committee is expected to propose a formula revision) do not augur well for IGL and MGL with high CNG in their sales mix. Regulations appear to have made it difficult for OMCs to hurt incumbents in retail CNG, but they may be hit if OMCs target BEST and DTC (10-43% of MGL-IGL's volumes). Despite likely strong H2FY21E EPS driven by lofty margins and no impact of competition in the near term, we reiterate **SELL** on IGL and **REDUCE** on MGL. Among CGD players, we prefer GGL. We estimate GGL's FY20-FY22E EPS CAGR at 22% (FY21E driven by margins and FY22E by volumes) and volume CAGR at 11% driven by ceramics, chemicals and pharmaceuticals and NGT order to implement ban on polluting fuels. We reiterate **BUY** on GGL and its parent GSPL (GGL is the main driver of GSPL's earnings). We retain **HOLD** on PLNG, despite its 21% 2-year EPS CAGR, given risk of domestic gas output rise and regas terminal overcapacity in Gujarat by FY23E.

Both FY21E-FY22E EPS likely to be up YoY only for GGL, GSPL and PLNG



Source: Company data, I-Sec research

CY21E global refinery utilisation to rise to 77.6% from 72.4% in CY20E



Source: EIA, IEA, Wood Mackenzie, I-Sec research

- **GAIL to gain from high oil prices:** Hopes that Covid vaccines would boost demand has led to surge in oil prices, which however may be capped due to: 1) lockdowns in US and Europe hitting demand, and 2) rising Libya, OPEC+ and US output. US sanctions on Iran exports, if lifted, may lead to oil price fall. High oil prices have boosted US rig count, oil and associated gas output, which in turn has led to fall in Henry Hub (HH) gas prices. Current spike in spot LNG prices due to liquefaction capacity outages is likely to be shortlived, but modest capacity additions will keep spot LNG prices high (FY22-FY23 futures at US$6.2-6.0/mmbtu). High oil, spot LNG and low HH prices would mean GAIL's gas marketing EBITDA at Rs9.2bn in H2FY21E (minus Rs8.9bn in H1) and Rs8.2bn in FY22E. We estimate GAIL's FY21 EPS to be down 37% YoY, but FY22E PS to be up 17% YoY. Retain **HOLD.**
- **GRM recovery key to IOC's stock performance**: IOC's share price is down 24% in CY20-TD despite H1FY21 EPS being up 117% YoY (driven by marketing margins and inventory gains) and trading at 0.85x FY21E P/BV and dividend yield of 7.3%. GRM recovery may be the key to IOC's share price rising. We estimate rise in global refinery utilisation to 77.6% in CY21E from 72.4% (38-year low) in CY20E, on vaccines boosting global demand and refinery closures, driving rise in IOC's GRM and its core EPS (excluding inventory gain) by 31% YoY. Retain **ADD.**

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Earnings and valuation summary

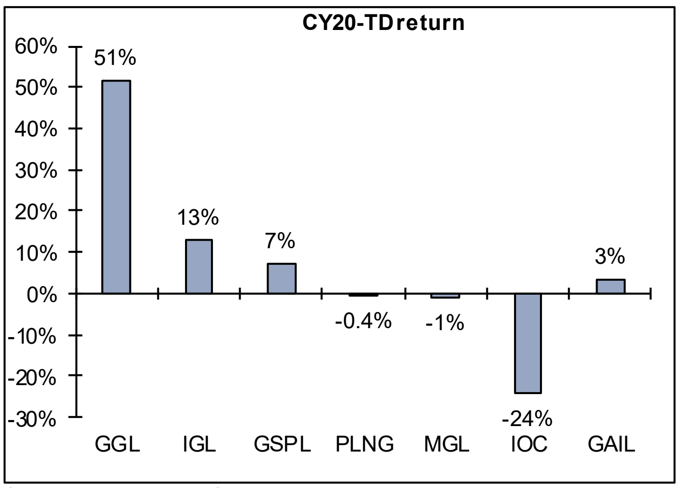
Table 1: Earnings and valuation summary

Gas companies	Rating	CMP Rs/share	FV Rs/share	Mkt cap US$mn	EPS (Rs) FY20	EPS (Rs) FY21E	EPS (Rs) FY22E	EV/EBITDA (x) FY20	EV/EBITDA (x) FY21E	EV/EBITDA (x) FY22E	BV (Rs/share) FY20	BV (Rs/share) FY21E	BV (Rs/share) FY22E
GAIL	HOLD	125	129	7,677	16.6	10.5	12.3	6.7	12.9	10.0	109.2	111.6	115.7
GSPL	BUY	235	297	1,803	23.0	26.6	29.6	4.6	4.3	3.4	86.6	109.8	136.0
PLNG	HOLD	267	256	5,442	15.4	19.1	22.5	8.9	7.5	7.1	74.1	79.2	89.0
GGL	BUY	360	442	3,366	13.3	15.8	19.8	15.9	13.7	10.9	48.2	59.4	74.5
IGL	SELL	483	378	4,599	16.9	16.1	18.3	20.8	20.2	18.0	76.5	90.8	107.2
MGL	REDUCE	1056	925	1,417	75.4	69.4	73.0	9.7	9.9	9.3	298.9	335.5	373.5
IOC	ADD	95	105	12,210	6.3	19.2	17.7	7.9	5.8	5.7	101.3	112.8	122.6

Gas companies	P/E (x) FY20	P/E (x) FY21E	P/E (x) FY22E	ROCE (%) FY20	ROCE (%) FY21E	ROCE (%) FY22E	ROE (%) FY20	ROE (%) FY21E	ROE (%) FY22E
GAIL	7.5	12.0	10.2	12.7%	4.8%	5.8%	12.6%	5.9%	7.6%
GSPL	10.2	8.8	8.0	21.2%	15.9%	16.0%	42.3%	27.1%	24.1%
PLNG	14.8	13.9	11.8	20.6%	18.5%	20.1%	25.3%	25.0%	26.8%
GGL	27.0	22.7	18.2	24.3%	24.8%	27.0%	33.6%	29.5%	29.6%
IGL	28.5	30.0	26.4	27.3%	22.4%	21.0%	24.4%	19.3%	18.5%
MGL	14.0	15.2	14.5	34.5%	27.5%	26.0%	27.9%	21.9%	20.6%
IOC	15.1	5.0	5.4	3.0%	11.0%	9.3%	-3.1%	16.5%	13.1%

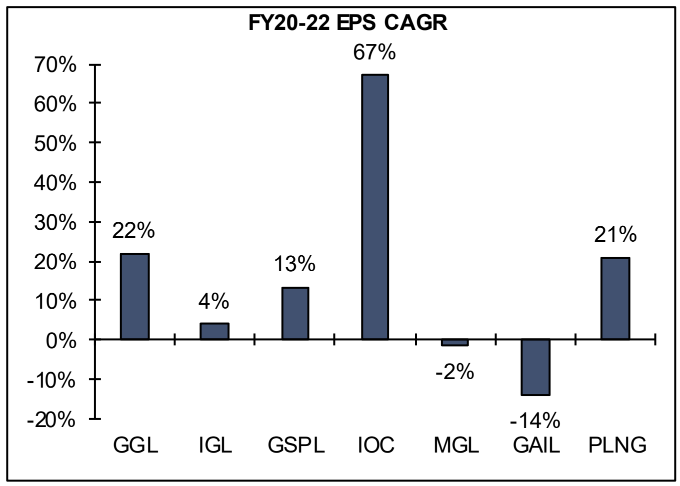
Source: Company data, I-Sec research

Chart 1: GAIL, GSPL, IGL and GGL up 3%-51% and IOC down 24% in CY20-TD



Source: Bloomberg, I-Sec research

Chart 2: 2-year EPS CAGR of GGL, PLNG & GSPL 13-22%; MGL-GAIL minus 2-14%



Source: Company data, I-Sec research

2020 – The year that was

All prices and margins except marketing down in Covid-hit CY20

Oil, gas, spot LNG & GRM down, but marketing margin up in CY20-TD

In CY20-TD:

- Brent at US$41.9/bbl is down 35% YoY
- Domestic gas price at US$2.7/mmbtu is down 28% YoY
- Spot LNG price at US$4.0/mmbtu is down 28% YoY
- Reuters' Singapore GRM at US$0.3/bbl is down 91% YoY
- Petroleum product sales volumes in India are down 19% YoY
- Crude throughput of Indian refiners is down 37% YoY
- Auto fuel net marketing margin at Rs3.80/l is up 47% YoY

Table 2: Oil, gas, spot LNG & GRM down, but marketing margin up in CY20-TD

	CY20-TD	CY19	YoY change
Brent (US$/bbl)	41.9	64.0	-35%
Domestic gas price (US$/mmbtu)	2.7	3.8	-28%
Spot LNG (US$/mmbtu)	4.0	5.5	-28%
Singapore GRM (US$/bbl)	0.3	3.7	-91%
India petroleum product sales (mmt)	174.7	216.9	-19%
Throughput (mmt)	160.9	254.9	-37%
Net marketing margin (Rs/l)	3.80	2.58	47%

Source: Bloomberg, PPAC, Reuters, I-Sec research

Marketing margins helped OMCs make up for GRM fall

OMCs were deep in the red in Q4FY20 (Q1CY20) due to large crude and product inventory loss on plunge in oil prices as spread of Covid depressed global oil demand. However, OMCs reported YoY surge in earnings in H1FY21 and seem to be on course for similar rise in earnings in Q3FY21E (Q4CY20E). This would be despite plunge in core GRM and decline in crude throughput and sales volumes, driven by surge in auto fuel marketing margins and crude and product inventory gains.

GAIL and upstream hit by oil & gas / LNG price fall

The plunge in global oil and domestic gas prices has hit upstream players. Low oil and spot LNG prices meant GAIL incurred loss by selling Henry Hub price linked US LNG at lower oil linked price and spot LNG prices in H1FY21.

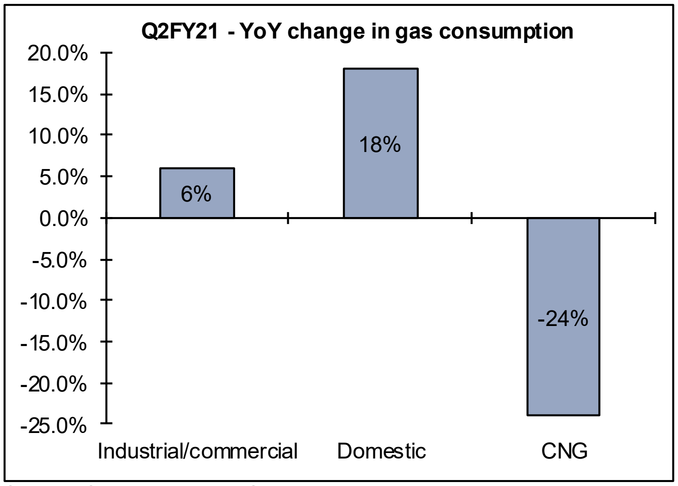
CGD, PLNG and GSPL gained from low domestic gas and LNG prices

CGD players, PLNG and GSPL have gained from low domestic gas and LNG prices, which helped them partly or fully make up for steep fall in volumes and in some cases helped quick recovery. Record low spot LNG prices led to rise in demand from the power sector, which helped GSPL achieve 1% YoY rise in its transmission volumes and PLNG to boost its regas volumes by 2% YoY in Q2FY21.

Low spot LNG prices boosted industrial volumes and margins of CGD

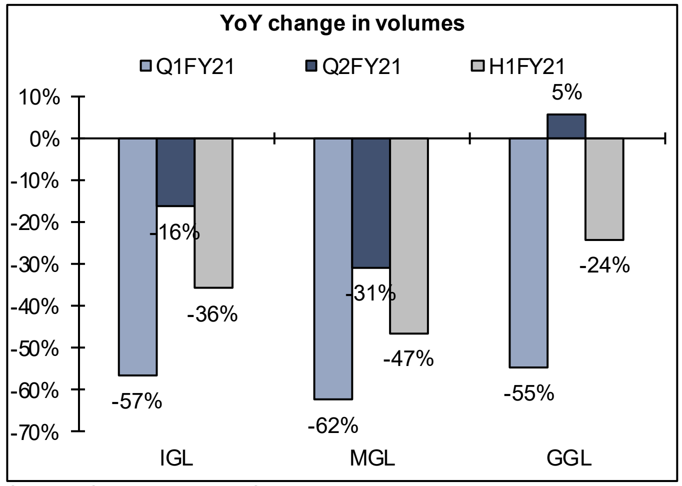
CGD players saw steep fall in volumes though industrial volumes recovered quickly to above pre-lockdown levels while recovery in CNG volumes is much slower. GGL, which has a higher proportion of industrial volumes, thus saw 5% YoY rise in Q2 volumes and its volumes are well above pre-lockdown level in Q3 as China plus one theme also appears to be boosting industrial volumes. CGD players boosted their EBITDA margin to record high levels in Q2FY21 by not passing on the full benefit of fall in spot LNG and domestic gas prices to consumers. Consequently, GGL was able to achieve strong enough EPS growth in Q2 to make up for the fall in Q1 EPS and ensure even H1 EPS is up YoY. IGL's Q2 EPS was up YoY, but that was not enough to make up for steep EPS fall in Q1. MGL's Q2 EPS was also down YoY though not as steeply as in Q1.

Chart 3: Gas consumption in industrial / commercial and domestic up; CNG down



Source: Company data, I-Sec research

Chart 4: IGL & MGL's volumes down 16-31% YoY in Q2; GGL's up 5% YoY driven by industrial



Source: Company data, I-Sec research

GGL, GSPL, PLNG & OMCs' H1 EPS up YoY despite volume fall

EPS was up YoY for eight of the 12 oil & gas companies in Q2FY21 and for six of them in H1FY21.

OMCs' H1 EPS surged YoY driven by marketing and inventory gain

OMCs' H1FY21 EPS surged 103-219% YoY on a low base driven by large inventory gains and 2.2x YoY surge in auto fuel marketing margins at Rs4.43/l. The rise in EPS was despite 51-67% YoY fall in core GRM, 18-23% YoY fall in sales volume and 5-29% YoY fall in throughput. Even if inventory gain/loss impact is excluded, OMCs' H1 EPS was up 17-59% YoY.

Table 3: H1FY21 EPS of PLNG, GGL, GSPL and IOC up 11-117% YoY

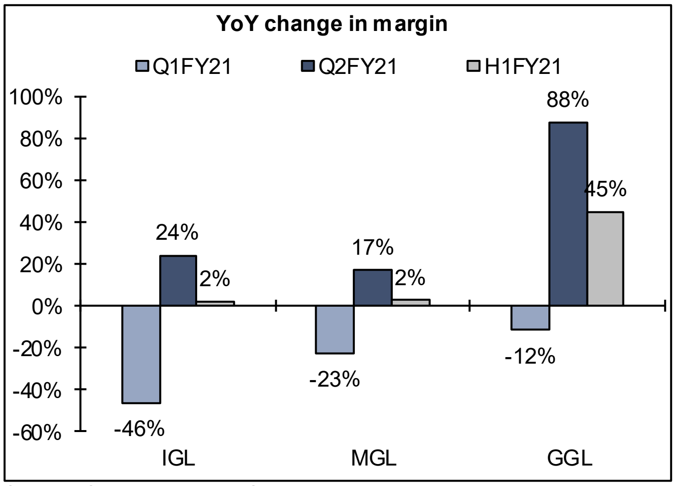
Recurring EPS (Rs/share)	H1FY21	H1FY20	YoY EPS change
IOC	8.8	4.0	117%
GAIL	3.7	5.9	-37%
GSPL	12.8	10.6	21%
PLNG	9.5	8.5	11%
GGL	7.8	6.8	14%
IGL	5.9	8.6	-31%
MGL	19.2	38.9	-51%

Source: Company data, I-Sec research

GGL, PLNG and GSPL's H1 EPS up YoY driven by surge in margins

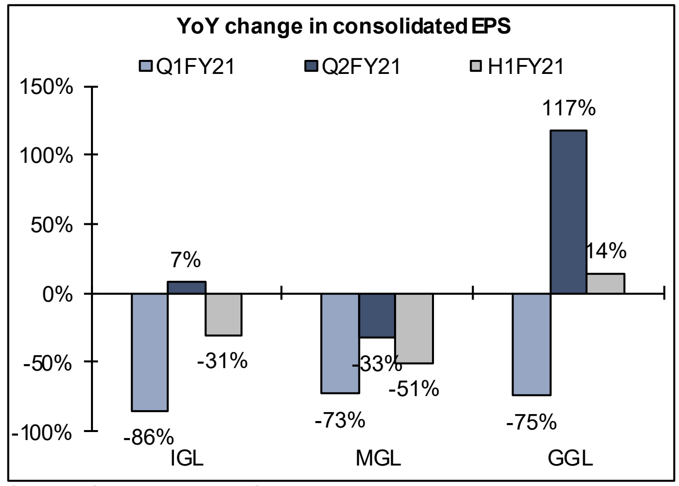
H1FY21 EPS of PLNG and GGL was up 11-14% YoY, despite 7-24% YoY decline in volumes. The EPS rise was due to 8% YoY rise in Dahej regas charge in case of PLNG and 45% YoY rise in EBITDA margin to Rs7.2/scm in case of GGL. GSPL's standalone H1 EPS was down 11% YoY, but H1 consolidated EPS was up 21% YoY driven by surge in share of its profit in GGL. GSPL, PLNG and GGL's volumes were up 1%, 2% and 5% YoY respectively in Q2FY21 implying recovery in volumes to, or above, pre-lockdown levels.

Chart 5: EBITDA margin of CGD companies up 17-88% YoY in Q2FY21 as gas cost fall not passed on



Source: Company data, I-Sec research

Chart 6: IGL & MGL's Q2 EPS up 7-117%; MGL's EPS fall less steep than in Q1 as margins surged



Source: Company data, I-Sec research

IGL & MGL's H1 hit by volume plunge; GAIL hit by gas marketing loss

H1FY21 EPS of IGL and MGL declined by 31-51% YoY, despite 2% YoY rise in EBITDA margin, hit by 36-47% YoY decline in volumes. IGL's Q2FY21 EPS was up 7% YoY driven by 24% YoY surge in EBITDA margin and despite 16% YoY decline in volumes. MGL's Q2 EPS was also down 33% YoY, despite 17% YoY rise in EBITDA margin, hit by 31% YoY decline in volumes. GAIL's H1FY21 EPS was down 37% YoY mainly due to gas marketing EBITDA loss of Rs8.9bn in H1FY21 *vs* EBITDA of Rs11.2bn in H1FY20.

GGL's share price up most in CY20-TD; IOC's down most

GAIL, GSPL, IGL and GGL up 3-52% in CY20-TD

The best stock performers in the Indian oil & gas sector in CY20-TD are:

- Gujarat Gas (GGL), up 51%
- Indraprastha Gas (IGL), up 13%
- GSPL, up 7%
- GAIL, up 3%

PLNG, MGL and IOC down 0.4-24% in CY20-TD

The worst stock performer in the Indian oil & gas sector in CY20-TD was IOC, down 24%. PLNG is down 0.4% while MGL's share price is down 1% in CY20-TD.

Table 4: GGL up most by 51% while IOC down most by 24% in CY20-TD

Stock price	31-Dec'19	15-Dec'20	CY20-TD	High	vs 15-Dec'20	Low	Vs 15-Dec'20
GGL	238	360	51%	412	-13%	191	89%
IGL	428	483	13%	534	-10%	284	70%
GSPL	220	235	7%	264	-11%	146	61%
PLNG	268	267	0%	283	-6%	170	57%
MGL	1,065	1,056	-1%	1,246	-15%	664	59%
IOC	126	95	-24%	130	-26%	71	34%
GAIL	121	125	3%	133	-6%	65	93%

Source: Bloomberg, I-Sec research

GGL, GSPL and IOC our top picks

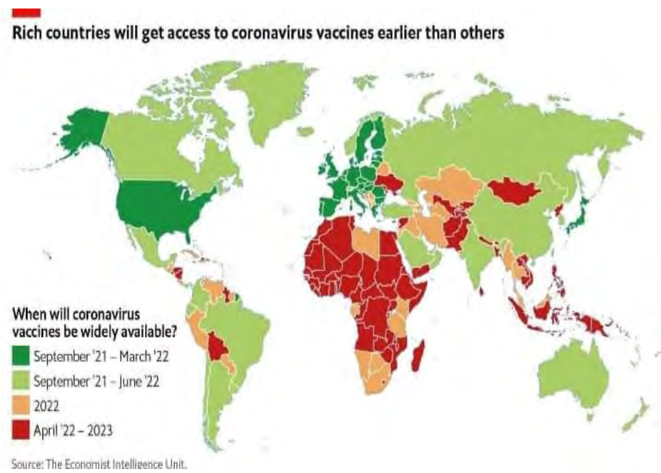
Vaccines to drive oil, LNG and GRM up YoY

Vaccinations to be widely available globally from Sep'21 to CY23E

Britain, the US and Canada have already begun vaccinations. Wide availability of vaccines against Covid is expected in:

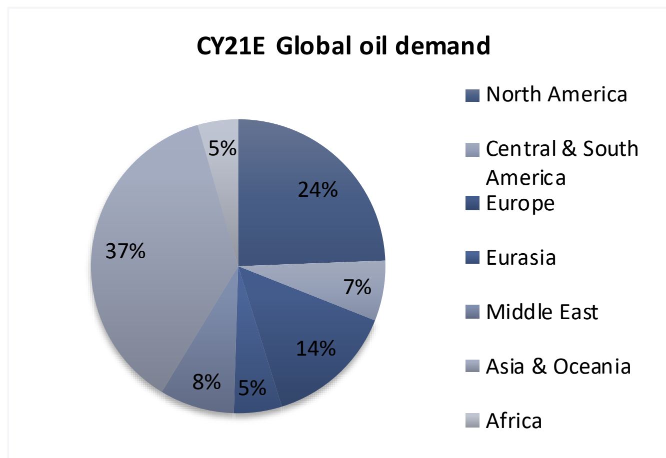
- US, Europe, Japan and Canada in Sep'21 to Mar'22.
- Most of the rest of the world in Sep'21 to Jun'22.
- Africa and some parts of Asia, Latin America and Middle East in CY22 to CY23E.

Chart 7: Vaccines availability will gradually widen from Sep'21 to CY23E



Source: The Economist, I-Sec research

Chart 8: Africa, which would get vaccine last, accounts for just 4% of global oil demand



Source: EIA, I-Sec research

Vaccine hopes drive up oil prices; to boost GRMs, gas & LNG prices

Hopes that rollout of vaccines against Covid would boost global oil demand have already driven up Brent prices by 35% from the lows of end-Oct'20 to ~US$50/bbl. Vaccines-driven demand recovery is also likely to boost GRMs, gas and spot LNG prices. GRMs, though up from lows, have not really improved after the announcements of high-efficacy vaccines against Covid in Nov'20. Spot LNG prices have surged, but it appears more driven by demand-supply factors specific to gas and LNG.

Oil prices to be up YoY, but some headwinds to further rise near term

Hopes that Covid vaccines would boost demand led to surge in oil prices. However, the following factors may cap oil prices in the near term and some may also trigger oil price fall:

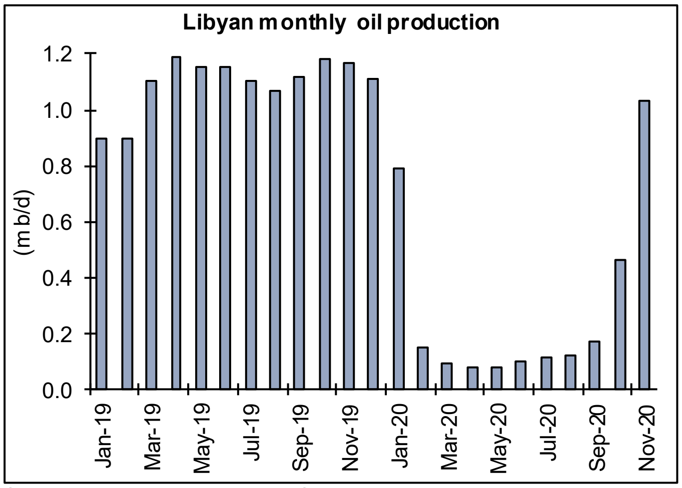
- Lockdowns in the US and Europe due to second Covid wave hitting demand.
- Rising Libya, OPEC+ and US output: Libyan oil output is over 1.2m b/d from just 0.17m b/d in Sep'20. OPEC+ is set to raise output by 0.5m b/d in Jan'21 and may continue to make similar monthly output increases so as to raise output by 1.9m

b/d from agreed levels in Dec'20. US oil output is up 1.1m b/d from the lows of Apr'20. US oil rig count rise by 50% (86) from the lows of mid-Aug'20 and WTI at US$46.6/bbl suggest US oil output would rise further.

- Biden administration lifting US sanctions on Iran oil exports.

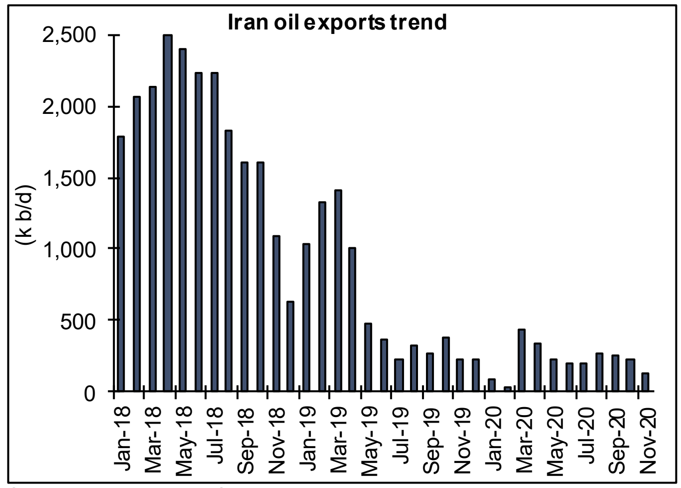
We estimate Brent to be up 19% YoY at US$50/bbl in CY21E and FY22E given the likely recovery in global oil demand as vaccinations are rolled out gradually.

Chart 9: Libyan oil output at 1.03m b/d in Nov'20 and 1.28m b/d now, up from 0.1m b/d in Jul'20



Source: Bloomberg, Reuters, I-Sec research

Chart 10: Iran oil exports down from 2.5m b/d in Apr'18 to 0.13m b/d in Nov'20 due to US sanctions



Source: Bloomberg, I-Sec research

GRMs remain weak due to second wave of Covid in US and Europe

Reuters' Singapore GRM hit an 8-month high of US$1.57/bbl in Oct'20 driven by the gradual recovery in global demand and decline in US gasoline inventory from highs in Apr'20. The announcements of high-efficacy vaccines against Covid boosted oil prices, but not GRMs. Singapore GRM in fact declined by 32% MoM to US$1.07/bbl in Nov'20 and further to US$0.46/bbl in Dec'20-TD due to fall in all product cracks except diesel and jet fuel. Petrol cracks are down from US$5.2/bbl in Oct'20 to US$2.8/bbl in Dec'20-TD. Second wave of Covid and resultant lockdowns appear to have hit demand in the US and Europe and hurt GRMs as is apparent from:

- US gasoline consumption fall is steeper at 14.4% YoY in the first week of Dec'20 and 9.9% YoY in Nov'20 *vs* 7.1-9.0% YoY fall in Sep-Oct'20.

- In Spain, diesel and gasoline consumption decline was steeper at 13.7-15.6% YoY in Oct'20 *vs* 7.7-6.6% YoY in Sep'20.

GRMs likely to be up YoY as vaccines are rolled out globally

Recovery in global oil demand, decline in bloated product inventories and closure of refineries to reduce refining overcapacity are key to GRM recovery. We expect GRM to be up YoY in CY21E/FY22E driven by:

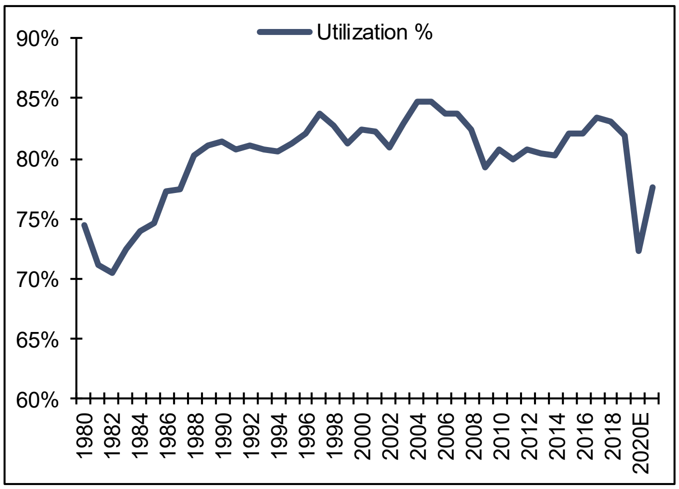
- Gradual vaccine rollout globally, which is expected to help boost global oil demand. IEA estimates global oil demand, which is down 8.8m b/d YoY in CY20E, to be up

5.8m b/d YoY in CY21E. US EIA's estimates of global oil demand fall in CY20E and recovery on CY21E are very similar to that of IEA.

- Decline in US gasoline and diesel inventories. They are up 6% from recent lows, but down 10-16% from highs in CY20-TD. As global demand gradually rises, it may help further whittle down global product inventories.

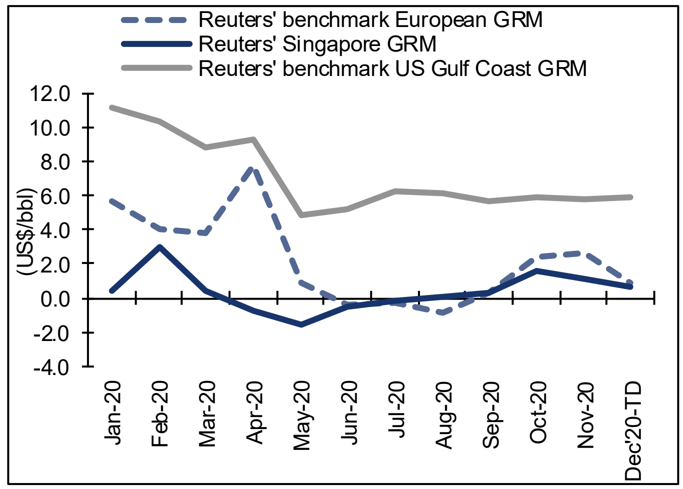
- Permanent closure of refining capacity, which helps boost global refinery utilisation to 77.6% in CY21E from a 38-year low of 72.4% in CY20E. We estimate permanent closure of 1.5m b/d refining capacity globally in CY20-CY21E. Permanent closure of another 1.4m b/d of capacity is under consideration.

Chart 11: Global refinery utilisation to rise to 77.6% in CY21E from 38-year low of 72.4% in CY20E



Source: EIA, IEA, Wood Mackenzie, I-Sec research

Chart 12: Benchmark GRMs across regions down sharply from Mar-Apr after Covid-19 hit globally



Source: Reuters, I-Sec research

Auto fuel marketing margin likely to be lower YoY as GRMs recover

Auto fuel net marketing margins are at Rs4.14/l in FY21-TD *vs* Rs1.83-2.22/l in FY19-FY20. Auto fuel net marketing margins are being kept at extraordinarily high levels to make up for the extreme weakness in GRMs and ensure that integrated refining and marketing margins are at levels enough to justify OMCs refining and selling petroleum products. Thus, as GRMs recover in CY21E/FY22E, auto fuel net marketing margins are likely to decline from the extraordinarily lofty levels in CY20/FY21E.

Recent spike in spot LNG due to short-term demand-supply factors

Spot LNG prices have surged from US$2.1-3.5/mmbti in Q1-Q2FY21 to US$7.0/mmbtu in Q3FY21-TD and have currently spiked to US$11.1/mmbtu for Jan'21 delivery. Current spike in spot LNG prices is due to:

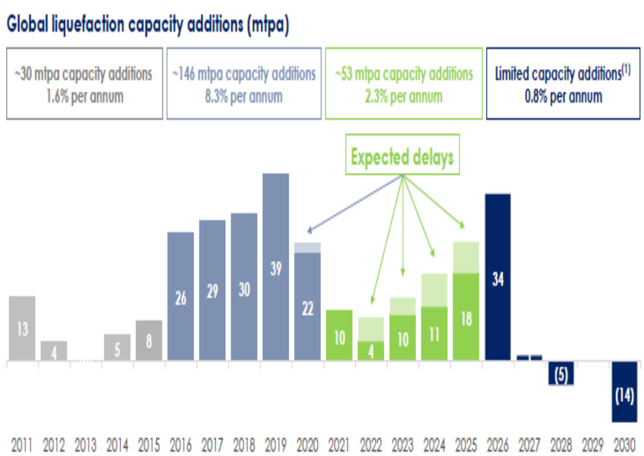
- Liquefaction capacity outages in Qatar, Australia and Malaysia.

- Strong demand in North-East Asia due to cold weather and in Brazil due to drought causing reduction in hydroelectric power generation and consequent rise in LNG imports to generate power.

- Transit delays at the Panama Canal for US LNG cargoes to Asia. These delays are caused by US LNG flows through the canal at record highs together with seasonal fog and added Covid safety procedures. Vessels that arrive without reservations will have to wait 10-15 days to pass through the Panama Canal. Longer waiting period at the Panama Canal and surging shipping rates for spot LNG cargoes are contributing to the spike in spot LNG prices.

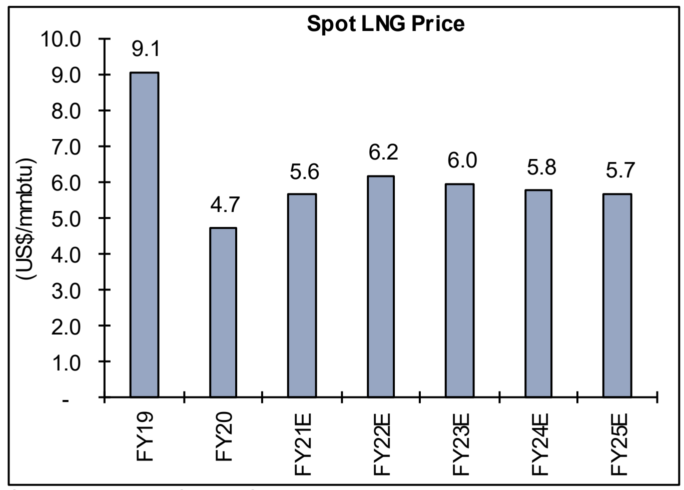
- Spike in oil prices is also probably supporting spot LNG prices.

Chart 13: LNG liquefaction capacity addition at just 75mmtpa in CY20-25E *vs* 124mmtpa in CY16-19



Source: Tellurian

Chart 14: Spot LNG at US$6.2-5.7/mmbtu in FY22-25E higher than US$4.7-5.6/mmbtu in FY20-21E



Source: Reuters, CME, I-Sec research

Spot LNG spike to be shortlived; futures at < US$6/mmbtu May-Oct'21

We expect the current spike to be shortlived as capacities in Qatar, Australia and Malaysia come back. Loading from Malaysia's Bintulu LNG plant are normalising after a brief disruption recently. QatarGas' 7.8mmtpa capacity LNG train was shut for unplanned maintenance during 19-22nd Nov'20 and repair could take three weeks. Shell's Prelude 3.6mmtpa floating LNG plant, which was shut earlier in CY20, is likely to start operations in Q1CY21. US LNG exports had surged to 9.2 bcf/d in Nov'20, 11.2 bcf/d in 3-9 Dec'20 and touched an all-time high of 11.5 bcf/d on 5-Dec'20. Spot LNG futures peak at US$10.6/mmbtu in Feb'21 and are below US$6/mmbtu in May-Oct'21.

Spot LNG prices to be higher in FY22E-FY26E than in FY20-FY21E

Modest liquefaction capacity additions – 75mmtpa in CY20-CY25E *vs* 124mmtpa in CY16-CY19 – will keep spot LNG prices higher in FY22E-FY26E than US$4.7/mmbtu in FY20 and US$5.6/mmbtu in FY21E. Spot LNG futures are currently at US$6.2-6.0/mmbtu in FY22E-FY23E, US$5.8/mmbtu in FY24E and US$5.7/mmbtu in FY25E-FY26E.

Henry Hub corrected on weak demand in Nov'20 and gas output surge

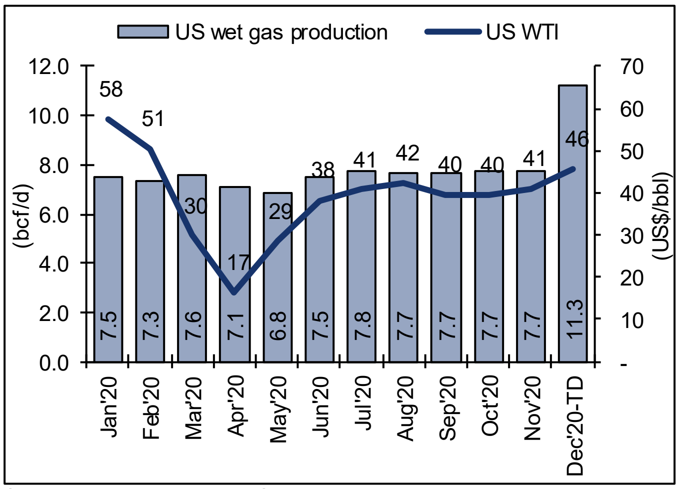
Henry Hub prices, which were briefly above US$3.0/mmbtu in late-Oct'20 and early-Nov'20, have corrected mainly due to:

- Mild weather in the US resulting in Nov'20 gas consumption being down 13% YoY (steepest fall in CY20-TD)

- Rising associated gas production on the back of rising US oil production, oil prices and oil rig count. Vaccine news flow in Nov'20 boosted oil prices, which in turn boosted US oil rig count, US oil and associated gas production. Associated gas production is up from 7.7 bcf/d in Nov'20 to 11.5 bcf/d during 26-Nov'20 to 2-Dec'20, and 11.2 bcf/d during 3-9 Dec'20.

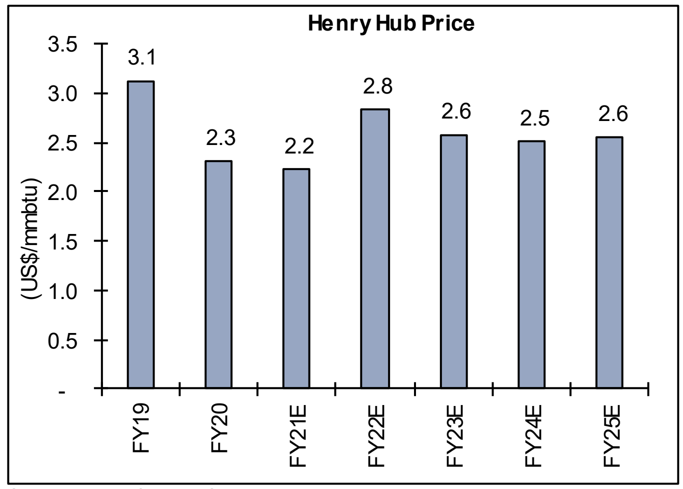
HH futures for Q4FY21E, which were at US$3.4/mmbtu on 25-Sep'20, are at US$2.7/mmbtu now probably due to the surge in WTI price, US oil rig count and, consequently, the expected rise in US oil and associated gas production.

Chart 15: Surge in WTI has boosted US wet gas production to a high of 11.3bcf/d in Dec'20-TD



Source: EIA, Bloomberg, I-Sec research

Chart 16: Henry Hub futures trend shows prices declining in FY22E-24E



Source: EIA, CME, I-Sec research

HH futures have declined while oil price has surged since end-Oct'20

Vaccines boosting oil prices by 35% from lows on 30-Oct'20 has led to rise in US oil rig count, expectation of rise in US oil and associated gas production and, consequently, led to fall in Henry Hub gas prices and futures. HH gas price, which was at US$3.03/mmbtu on 30-Oct'20, is down to US$2.6/mmbtu on 15-Dec'20 while Brent, which was at US$36.9/bbl on 30-Oct'20, is up to US$49.72/bbl on 15-Dec'20. HH futures for Q4FY21E were at US$3.3/mmbtu and FY22E-FY23E futures were at US$3.1-2.7/mmbtu on 26-Oct'20 when Brent was at US$39.8/bbl. Now with Brent up at US$49.72/bbl, HH futures for Q4FY21E are down to US$2.7/mmbtu and for FY22E-FY24E down to US$2.8-2.5/mmbtu. Thus, while Brent is up by 25% from levels on 26-Oct'20, HH futures for Q4FY21E and FY22-FY23E are down by 4-20%.

Table 5: While Brent is up 25% from levels on 26-Oct'20, Henry Hub futures for Q4FY21E and FY22-FY23E are down 4-20%

		Henry Hub futures for			
	Brent	**Q4FY21E**	**FY22E**	**FY23E**	**FY24E**
15-Dec'20	49.72	2.7	2.8	2.6	2.5
26-Oct'20	39.81	3.3	3.1	2.7	2.5
Change	**25%**	**-20%**	**-7%**	**-4%**	**-1%**

Source: Bloomberg, CME, I-Sec research

Prefer GGL & GSPL among gas, and IOC among oil companies

Raise target price by 6-43%; EPS estimates raised in most cases

We have raised target prices by 6-43% with the upgrade being the highest in case of GAIL (43%). In GAIL's case our target price is now based FY22E estimates for its cyclical businesses. The upgrade is mainly driven by change of fortunes in its gas marketing business. Our target price was earlier based on gas marketing EBITDA loss of Rs14.9bn in FY21E while it is now based on gas marketing EBITDA of Rs8.2bn in FY22E. IOC's target price is also now based on 6x FY22E EV/EBITDA vs 6x FY21E EV/EBITDA earlier. GGL's DCF based target price upgrade is driven by upgrade in its FY21-FY22E EPS by 9-15%. IGL and MGL's DCF based target price upgrade is also driven by upgrade in their FY21-FY22E EPS. We have raised earnings of all companies except PLNG. PLNG's target price upgrade is driven by assuming higher long-term utilisation of its Kochi terminal of 70% vs 55% earlier.

Table 6: Raise target price by 6-43%; EPS estimates of all raised except PLNG

	Target Price (Rs/share)			EPS change (%)	
	New	Old	Change (%)	FY21E	FY22E
GGL	442	349	27%	9.4%	14.9%
IGL	378	333	14%	9.2%	9.0%
GSPL	297	273	9%	3.7%	8.7%
PLNG	256	241	6%	-6.1%	-1.8%
MGL	925	817	13%	27.3%	9.5%
IOC	105	87	21%	21.6%	11.9%
GAIL	129	90	43%	41.5%	17.6%

Source: Company data, I-Sec research

Prefer GGL in CGD as its growth is strong and least hit by competition

Among CGD players, we prefer GGL given its strong EPS and volume growth and as it is likely to be least hit by competition as follows:

- **Stronger EPS growth than peers in FY21E-FY22E**: We estimate GGL's EPS to be up YoY both in FY21E as well as FY22E with its FY20-FY22E EPS CAGR at 22% being higher than that of its peers. GGL's H1FY21 EPS is up 14% *vs* 31-51% YoY decline for IGL and MGL, and we estimate its FY21E EPS to be up 19% YoY *vs* 5-8% YoY decline for IGL and MGL.
- **Best play on strong industrial volume growth driven by Court/NGT orders to switch to gas and 'China plus one'**: Court or NGT orders requiring polluting fuels to be replaced by gas is the most attractive theme in the CGD sector at a time when CNG market could see competition and gas cost rise. Indian manufacturing boosted by 'China plus one' may be another theme. GGL is the best play on both these themes given its presence in geographical areas (GAs) dominated by industrial volumes. We estimate GGL's 2-year volume CAGR at 11.4% driven by ceramics (Morbi), chemicals and pharmaceuticals (south Gujarat) and NGT order to implement ban on polluting fuels.
- **Least vulnerable to competition**: We believe GGL is the least vulnerable to competition as its CNG volumes are smaller and spread over a much larger geographical area than IGL and MGL. In Morbi, GGL's potential competitor GAIL will find it difficult to compete given its high-priced long-term contracted LNG volumes *vs* GGL's cheaper spot LNG-dominated volumes.

Reiterate BUY on GGL.

GSPL's 2-year EPS CAGR at 13% driven by GGL; reiterate BUY

We estimate GSPL's EPS also to be up YoY in FY21E as well as FY22E with FY20-FY22E EPS CAGR at 13%. GGL would be the main driver of its earnings. GSPL's H1FY21 consolidated recurring EPS is up 21% YoY and we estimate its FY21E EPS to be up 16% YoY and FY22E to be up 11% YoY. GSPL's volumes are already above pre-lockdown levels. The strength in spot LNG prices may hurt its growth, but its transmission volumes would be boosted by rise in domestic gas output by 45-50mmscmd over the next 3-4 years. Of the 5mmscmd of KG D6 gas auctioned in Nov'19, ~4mmscmd is likely to be transported by GSPL; 1.2mmscmd was bought by parent GSPC while another 2.25mmscmd by its customer Essar Steel. As domestic output rises, GSPL's volumes are likely to rise further. We reiterate **BUY** on GSPL.

Table 7: GGL, GSPL and PLNG's FY20-FY22E EPS CAGR at 22%, 13% and 21%

	Rating	Target price (Rs/share)	Upside	FY20-22E EPS CAGR
GSPL	BUY	297	26%	13%
GGL	BUY	442	23%	22%
MGL	REDUCE	925	-12%	-2%
GAIL	HOLD	129	3%	-14%
PLNG	HOLD	256	-4%	21%
IOC	ADD	105	10%	67%
IGL	SELL	378	-22%	4%

Source: I-Sec research

IGL-MGL more vulnerable to competition; reiterate SELL/REDUCE

For CGD players with high CNG in their sales mix like IGL and MGL, we see the following challenges:

- **Regulations allowing competition have been notified by PNGRB in Nov'20**. OMCs', through whose sites IGL and MGL sell 60-65% of their CNG volumes, are likely to emerge as competitors. Impact of competition may be less severe than we earlier thought. This is because regulations do not allow OMCs to terminate contracts with authorised CGD player and install their CNG dispensers in place of the existing one. Whether OMCs can install their own CNG dispensers in addition to that of the authorised CGD players' is also a grey area. However, if OMCs target BEST and DTC, which we estimate account for 10-43% respectively of MGL-IGL's CNG volumes, it may impact the two companies' volumes and margins.

- **OMCs demanding 90-100% rise in commission on CNG sold from their sites retrospectively w.e.f. Apr'18.** Currently OMCs charge commission of Rs3.7-4.0/kg. Hike of 90-100% may mean rise to Rs7-8/kg.

- **Likely rise in domestic gas prices due to revision of prevailing formula.** Price of gas under the prevailing formula linked to gas prices in the US, UK, Russia and Canada is down to US$2/mmbtu in H2FY21 and is likely to be US$2.0-2.7/mmbtu in H1-H2FY22E *vs* APM gas producers' cost of US$3.0-3.7/mmbtu. The petroleum ministry has set up a committee to review and propose revision of the prevailing formula. It appears that gas pricing formula may be revised when price is due for revision in Apr'21 or even earlier. Linking domestic gas prices to LNG prices (price of India's contracted volumes and spot) instead of gas prices in Russia and Canada is the change in formula required in our view.

We expect IGL and MGL to report strong H2FY21E results driven by further rise in margins (Q2 margins at all-time high); benefit of fall in domestic gas price has not been fully passed and opex is set to decline further given the sharp QoQ rise in CNG volumes. We still expect 5-8% YoY decline in FY21E EPS *vs* 31-51% YoY decline in H1. Impact of competition is unlikely in the near term as the regulations notified are only enabling in nature and competition would have to be allowed one by one in various GAs by the PNGRB and term of three of the four members of PNGRB has ended. The only near-term negative may be increase in domestic gas prices, which is likely to bring down margins from the prevailing lofty levels. We believe any strength in IGL and MGL share prices is an opportunity to exit or reduce investment before impact of competition becomes visible. We reiterate **SELL** on IGL given its lofty valuation and its greater vulnerability than MGL to large CNG consumers like DTC being targeted by competition. We reiterate **REDUCE** on MGL, which has modest volume growth outlook and is more vulnerable to decline in margin due to competition given its lofty margins.

PLNG: Given multiple concerns, retain HOLD despite 21% EPS CAGR

The following are concerns about PLNG:

- Domestic gas output is likely to rise by 40-50mmscmd in the next 3-4 years and would be cheaper than most LNG imported on PLNG’s terminals.

- Regasification overcapacity is likely in Gujarat on commissioning of 5mmtpa Swan LNG terminal in Mar’22, 5mmtpa Chhara terminal in end-CY22 and resolution of pipeline bottleneck to allow 5mmtpa Mundra terminal to ramp up.

- Kochi LNG terminal regassification charge may need to be cut further as offtakers have asked for a further cut and matter has been referred to a committee of independent directors. Kochi regas charge, even after the cut in FY20, at Rs83/mmbtu in FY21, is higher than Rs63/mmbtu at the newly commissioned Ennore terminal.

- New volumes tied up at Dahej after the 7.5mmtpa RasGas contract expires in CY28 is likely to be at lower regas charge given the overcapacity likely by then.

Rise in domestic gas output and regassification overcapacity in Gujarat would limit growth of volumes at PLNG’s Dahej terminal and could also lead to decline in utilisation to below its rated capacity of 17.5mmtpa (tied up volumes of only 15.75mmtpa). We estimate PLNG’s FY20-FY22E EPS CAGR of 21% driven by 5% p.a. rise in regas charge at its Dahej and Kochi (may have to be cut first) terminals and ramp-up of Kochi terminal utilisation to 30-35% from 15% now that Kochi-Mangalore pipeline is commissioned. Retain **HOLD** on PLNG until more clarity on the concerns.

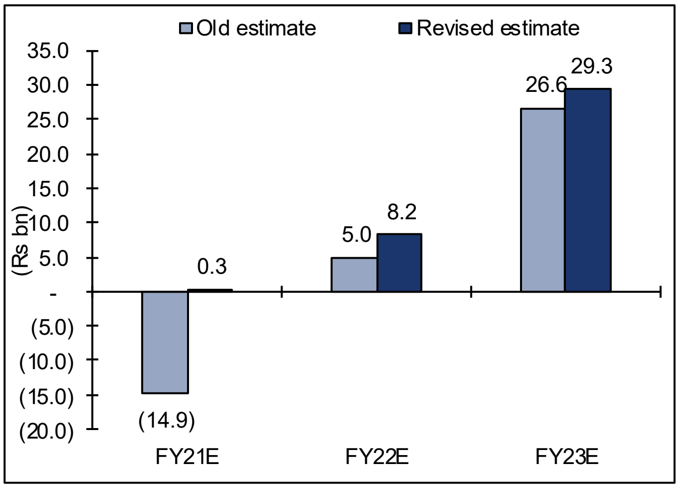
GAIL: Oil price recovery has improved earnings outlook; retain HOLD

GAIL’s earnings outlook has improved with the recent spike in oil prices and vaccine rollout, which is likely to mean oil and spot LNG prices (low liquefaction capacity addition to support prices) is up YoY while Henry Hub price is down YoY in FY22E/CY21E; higher oil prices are likely to boost US oil and associated gas output, which in turn has and would lead to fall in HH gas price. We now estimate GAIL’s gas marketing EBITDA at:

- Rs9.2bn in H2FY21E *vs* earlier estimate of minus Rs6bn and minus Rs8.9bn in H1FY21.
- Rs342mn in FY21E *vs* earlier estimate of minus Rs14.9bn,
- Rs8.2bn in FY22E *vs* earlier estimate of Rs5bn.

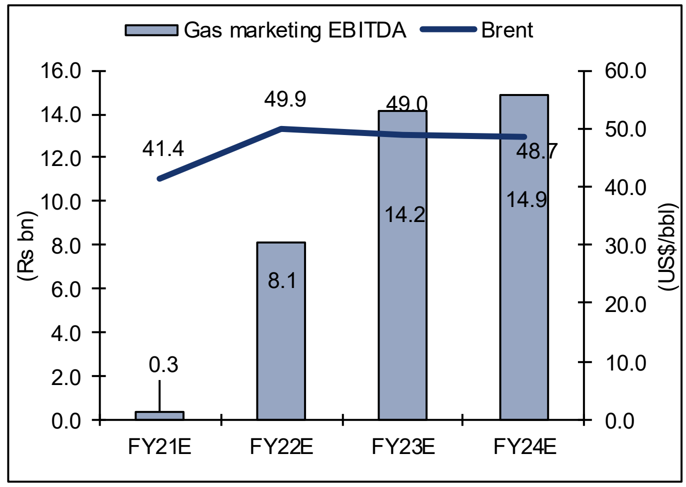
Higher gas marketing EBITDA is main driver of upgrade in FY21E EPS by 42% and FY22E EPS by 18%. We expect GAIL's FY21E EPS to be down 37% YoY (down 55% YoY earlier), but FY22E EPS to be up 17% YoY and FY20-FY22E EPS CAGR at minus 14%. Reiterate **HOLD** on GAIL.

Chart 17: FY21-23E gas marketing EBITDA up by Rs2.7-15.2bn as oil higher & HH lower



Source: Company data, CME, I-Sec research

Chart 18: Gas marketing EBITDA at Rs8.1-14.9bn in FY22-24E at Brent and HH futures



Source: Company data, CME, I-Sec research

IOC's share price down 24% in CY20-TD despite surge in H1FY21 EPS

IOC's H1FY21 EPS is up 117% YoY driven by surge in auto fuel net marketing margin and inventory gains, which helped make up for decline in GRM, sales volumes and throughput. H1 EPS net of inventory impact was also up 51% YoY. We estimate 203% YoY jump in IOC's FY21 EPS driven by auto fuel marketing margins rise and inventory gains. However, despite strong earnings growth in H1 and even stronger earnings growth outlook in FY21E, IOC's share price is down 24% in CY20-TD.

IOC's core FY22E EPS to be up 31% YoY, but reported EPS down 8%

We estimate IOC's FY22 reported EPS to be down 8% YoY. We are assuming:

- Rise in reported GRM to US$3.4/bbl from US$2.45/bbl in FY21E. Core GRM is estimated to be US$1.45/bbl in FY21E and US$3.4/bbl in FY22E.
- 22% YoY rise in crude throughput to 69mmt.
- Decline in auto fuel net marketing margin to Rs2.5/l from Rs3.3/l in FY21E. We are assuming that once GRMs recover, there would be decline in auto fuel marketing margins from lofty levels in FY21E. IOC's CFO had indicated in an interview that supernormal auto fuel marketing margins would continue as long as GRMs are

weak so as to ensure integrated refining and marketing margin are at reasonable levels to justify producing and selling refined products.

- 12.7% YoY rise in domestic sales volumes to 98.25mmt.

However, core FY22E EPS (excluding inventory gain) would be up 31% YoY when compared with FY21E core EPS excluding crude and product inventory gain of ~Rs80bn.

GRM recovery key to IOC's stock performance; vaccines to help

IOC's poor stock performance in CY20-TD may be due to GRM being at record lows as global oil demand led to global refinery utilisation declining to 38-year low of 72.4% in CY20. Significant recovery in GRM appears to be key to improvement in IOC's stock performance. Recovery in global oil demand, decline in bloated global product inventories and refinery closures to cut overcapacity are key to GRM recovery. Recovery in global oil demand by 5.8m b/d due to rollout of vaccines and decline in refining capacity by 1m b/d in CY21E (impact of 1.5m b/d capacity refinery closure in CY20-21E) is likely to boost global refinery utilisation to 77.6% in CY21E. We expect the rise in global refinery utilisation to boost IOC's core GRM from US$1.45/bbl in FY21E to US$3.4/bbl in FY22E.

Reiterate **ADD** on IOC, which is trading at an attractive 0.85-0.78x FY21E-FY22E P/BV and at a dividend yield of 7.3%. As discussed, GRM recovery may be key to improvement in IOC's stock performance. Vaccine rollout boosting global demand and refining capacity closures that boost global utilisation may drive recovery in GRM.

Prefer GGL among CGD players; BUY also on GSPL

GGL outperformed peers in H1; GSPL and PLNG also did well

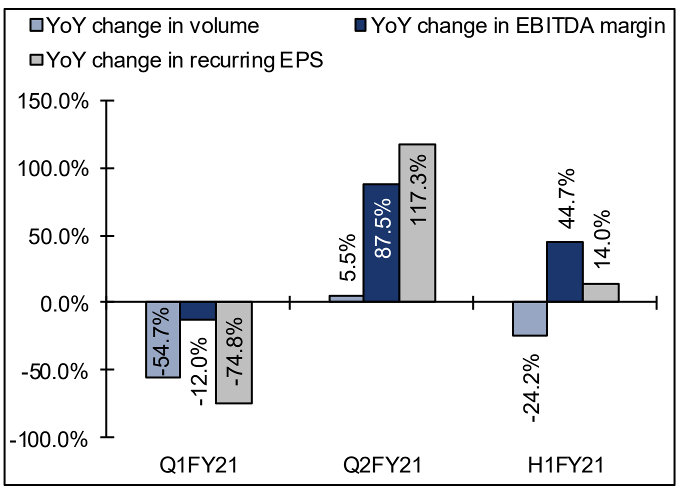
GGL's H1 EPS up 14% YoY *vs* 31-51% YoY fall for IGL and MGL

GGL's H1FY21 recurring EPS was up 14% YoY driven by 45% YoY rise in EBITDA margin to Rs7.2/scm, which helped more than make up for 24% YoY fall in volumes. IGL's H1 consolidated recurring EPS was down 31% YoY hit by 36% YoY decline in sales volumes; its EBITDA margin rise of 2% YoY was unable to make up for the steep volume decline. MGL's H1 recurring EPS decline was steeper at 51% YoY as its volume fall was steeper at 47% YoY. Its H1 EBITDA margin was also up 2% YoY.

GGL's H1 EPS rise driven by 117% YoY rise in Q2; Q1 down 75% YoY

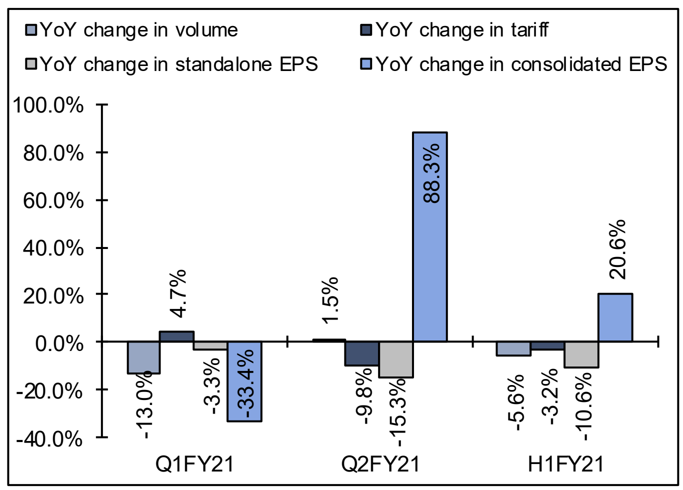
GGL's Q1 recurring EPS was down 75% YoY, hit by 55% YoY decline in volumes and 12% YoY decline in EBITDA margin on a high base. Its Q1 EBITDA margin, though down YoY, was at a 4-quarter high. GGL's Q2FY21 EPS rise by 117% YoY helped make up for steep decline in Q1 EPS and drove 14% YoY rise in H1 EPS. Its Q2 EPS rise was driven by 88% YoY rise in EBITDA margin to an all-time high of Rs8.1/scm and 5% YoY rise in volumes.

Chart 19: GGL's H1FY21 EPS up 14% YoY driven by 45% YoY rise in EBITDA margin



Source: Company data, I-Sec research

Chart 20: GSPL's H1 consolidated EPS up 21% YoY driven by rise in GGL's EPS

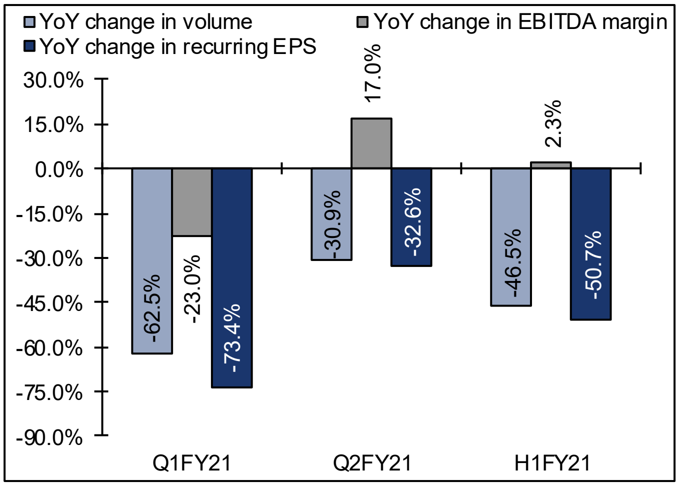


Source: Company data, I-Sec research

IGL's Q2 EPS rise of 7% unable to make up for Q1 decline of 59% YoY

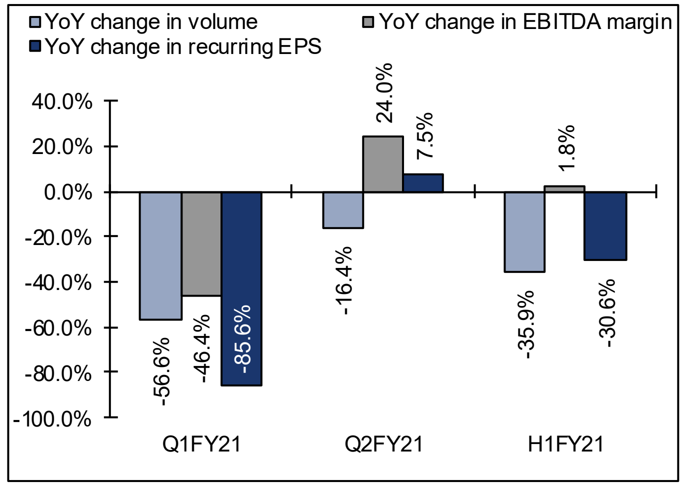
IGL's Q1 recurring consolidated EPS was down 59% YoY, hit by 57% YoY decline in volumes and 46% YoY decline in EBITDA margin. Company's Q2FY21 EPS rise by 7% YoY was unable to make up for steep decline in Q1 EPS and ensure YoY rise in H1 EPS. Its Q2 EPS rise was driven by 24% YoY rise in EBITDA margin to an all-time high of Rs8/scm, which helped make up for 16% YoY fall in volumes.

Chart 21: MGL's H1FY21 EPS down 51% YoY hit by volume decline of 47% YoY; margins up 2.3% YoY



Source: Company data, I-Sec research

Chart 22: IGL's H1FY21 EPS down 31% YoY hit by volume decline of 36% YoY; margins up 1.8% YoY



Source: Company data, I-Sec research

MGL's Q2 as well as Q1 EPS down 33-73% YoY

MGL's Q1 recurring consolidated EPS was down 73% YoY hit by 62% YoY decline in volumes and 23% YoY decline in EBITDA margin. MGL's Q2FY21 EPS was also down 33% YoY, despite 17% YoY rise in EBITDA margin to an all-time high of Rs11.6/scm, hit by 31% YoY decline in volumes.

GSPL's H1 consolidated EPS up 21% YoY driven by rise in GGL's EPS

GSPL's standalone H1FY21 EPS was down 11% YoY with decline in Q1 and Q2 EPS being 3-15% YoY. Its consolidated Q2FY21 EPS rise of 88% YoY helped make up for 33% YoY fall in Q1 EPS and drive 21% YoY rise in consolidated H1FY21 EPS. 117% YoY rise in subsidiary GGL's Q2 EPS was the main driver of increase in GSPL's Q2 consolidated EPS.

PLNG's H1 EPS up 11% YoY driven by 29% YoY rise in Q2 EPS

PLNG's Q1FY21 EPS was down 11% YoY hit by 16% YoY decline in its regas volumes though its Dahej regas charge was up 2% YoY. Its Q2 consolidated EPS rise by 29% YoY helped make up for decline in Q1 EPS and drive 11% YoY rise in consolidated H1 EPS. PLNG's Q2FY21 EPS rise was driven by 2% YoY rise in regas volumes and 10% YoY rise in Dahej regas charge.

Return of volumes to pre-lockdown levels drove YoY rise in H1 EPS

PLNG, GSPL and GGL's H1FY21 consolidated EPS was up 11-21% YoY. One of the main drivers of their earnings growth was the quick rebound in their volumes to pre-lockdown levels. GSPL and PLNG's Q1 transmission and regas volumes respectively were down just 11-16% YoY as against much steeper fall for the three CGD players. GSPL, PLNG and GGL's Q2 volumes were up 1%, 2% and 5% YoY respectively.

IGL and MGL's H1 EPS down YoY; volumes down YoY even in Q2

On the other hand, sales volumes for IGL and MGL languished below pre-lockdown levels even in Q2. IGL and MGL's Q1 volumes were down 57-62% YoY and Q2 volumes were down 16-31% YoY respectively. This meant that, despite H1FY21 EBITDA margin of IGL and MGL being up YoY, their H1 EPS was down 31-51% YoY.

Multiple headwinds for CGD players including gas price reforms

Policy regime favourable for CGD players with high CNG volumes

CGD players have until now benefited from the following favourable policies:

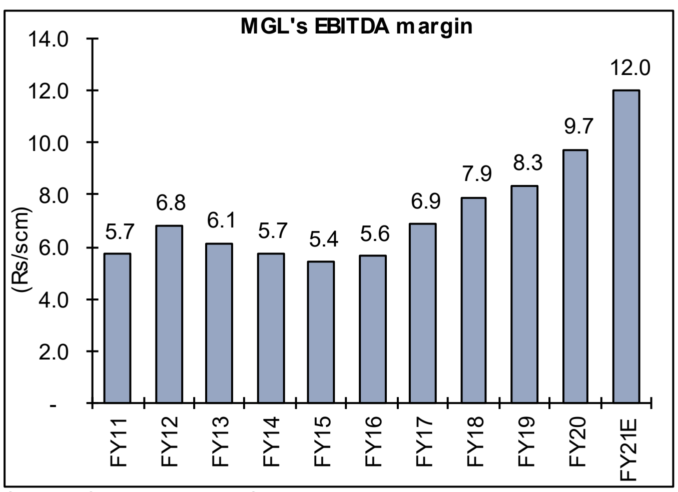
- Monopoly in geographical areas they operate in.

- CNG and domestic PNG have top priority for access to cheap domestic gas since Feb'14. Domestic gas prices, which are linked to gas prices in the US, UK, Russia and Canada, are not only low but also stable as they are revised semi-annually.

IGL & MGL's EBITDA margin up 14-80% to Rs6.4-9.7/scm in FY15-FY20

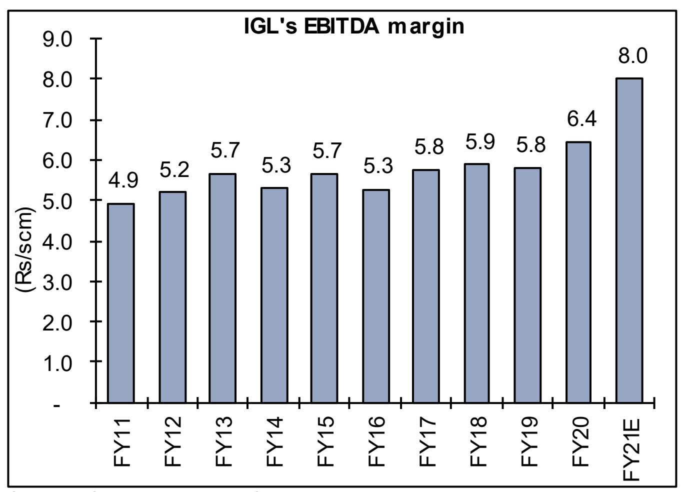
IGL and MGL, for whom CNG and domestic PNG accounted for 80-86% of total volumes in FY20, have gained the most from their polices. MGL's EBITDA margin in FY20 at Rs9.7/scm is 80% higher than 5-year ago level of Rs5.4/scm in FY15 while IGL's EBITDA margin was up 14% to Rs6.4/scm during the same period. IGL's EBITDA margin was just Rs4.9/scm in FY11. CNG and domestic PNG accounted for 22% of GGL's volumes and its FY20 EBITDA margin at Rs4.7/scm was up just 2% from 5-year ago levels.

Chart 23: MGL's EBITDA margin up 42-80% over 3-5 years to Rs9.7/scm in FY20



Source: Company data, I-Sec research

Chart 24: IGL's EBITDA margin up 12-14% over 3-5 years to Rs6.4/scm in FY20



Source: Company data, I-Sec research

Competition, gas cost rise & possible commission rise risks to outlook

Policy environment is now changing with competition set to emerge and gas prices likely to rise. Following are the headwinds to outlook of CGD players:

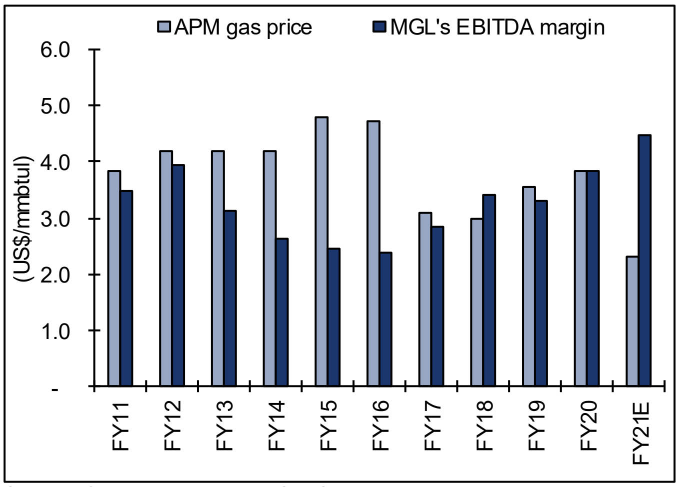
- Competition is likely to emerge as regulations allowing competition have been notified by the regulator PNGRB in Nov'20.

- OMCs have demanded 90-100% rise in commission, which they charge on CNG sold from dispensers of CGD players on their petrol pumps.

- Spot LNG price is likely to be higher in the next few years than in FY20-FY21E due to much more modest global LNG liquefaction capacity addition.

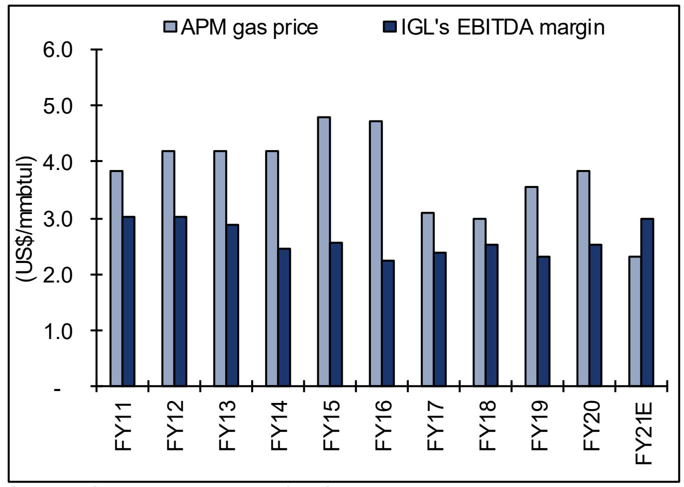
- Likely rise in domestic gas price: A committee has been constituted by the petroleum ministry to propose revision to the current gas pricing formula, under which gas price has collapsed to US$2/mmbtu in H2FY21 and is likely to be only modestly higher at US$2.35/mmbtu in FY22E.

Chart 25: MGL's FY21E EBITDA margin to be 92% higher than APM gas price



Source: Company data, PPAC, I-Sec research

Chart 26: IGL's FY21E EBITDA margin to be 29% higher than APM gas price



Source: Company data, PPAC, I-Sec research

Competition to be allowed one by one in GAs where exclusivity over

PNGRB has notified access code and transportation rate determination regulation for CGD networks. These regulations are only enabling provisions. PNGRB would now declare CGD areas, where exclusivity period is over, as common carrier or contract carrier one by one, and thereby allow competition.

Incumbent to give at least 20% of its network capacity to new entrants

At least 20% of the CGD network and compression capacity would have to be made available for open access to new entrants as per the notified regulations. PNGRB in a call with investors on 6-Jul'20 had stated that if spare capacity is more than 20% of network capacity, it may have to be offered for open access. Thus, possibly even more than 20% of capacity may become available to new entrants.

OMCs likely to emerge as formidable competitors

OMCs, which have authorisation for 77 CGD areas, have repeatedly indicated that they are keen to foray in to large-volume CGD areas like Delhi, Mumbai and Pune when competition is allowed. IGL is the authorised entity in Delhi and holds 51% stake in the entity, which is the authorised entity in Pune. OMCs would be formidable competitors given that 60% of IGL's volumes and 60-65% of MGL's volumes are from CNG stations, which are on OMC sites.

OMCs have demanded 90-100% rise in commission w.e.f. Apr'18

OMCs, who currently receive commission of Rs3.7-4.0/kg on CNG sold from dispensers on their sites, have fired the first salvo by demanding 90-100% rise in their commission retrospectively w.e.f. Apr'18. Thus, while incumbents would charge new entrants (likely to be OMCs) cost plus 12% return tariff for use of up to, or over, 20% of their transmission capacity, OMCs could charge incumbents like IGL and MGL hefty commissions on 60-65% of CNG dispensed from OMCs' sites.

OMCs cannot replace existing players' CNG dispensers with their own

PNGRB inserted in the notified regulation a provision, which was not in the draft regulation and which is likely to make it tougher for OMCs to compete with existing CGD players. This provision is intended to ensure that OMCs do not terminate their contract with existing CGD players and set up their own dispensers in CNG stations where incumbent had one. PNGRB inserted this provision as it wanted new infrastructure to be created by the new entrants. 56% of IGL's and 73% of MGL's CNG stations are on OMC sites.

Whether OMCs can add their dispensers in existing sites is a grey area

Whether OMCs can set up own dispensers while continuing to dispense CNG for incumbents is a grey area. In our discussion on this matter with the PNGRB Chairman, he said "probably that may also not be allowed" but agreed it was a grey area. If OMCs can install CNG dispensers only at petrol stations where incumbents do not have a presence, it is likely to delay competition and the impact on incumbents may be less severe as many of the most suitable locations may have been already taken by the incumbents.

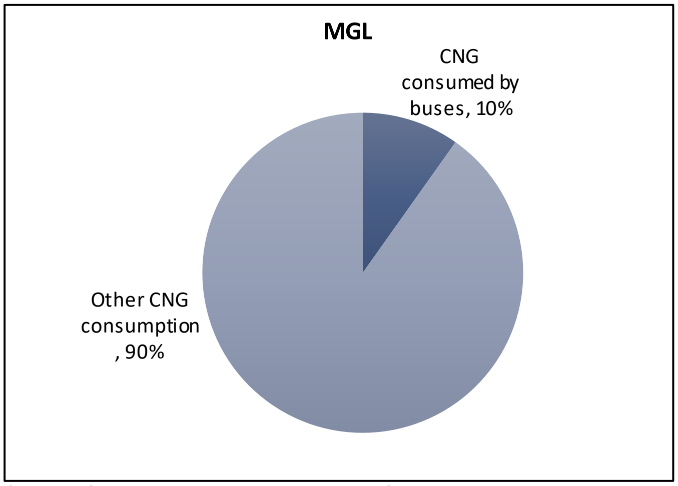
New entrants may target large customers like DTC and BEST

New entrants could target large CNG consumers like Delhi Transport Corporation (DTC) and Brihanmumbai Electric and Suburban Transport (BEST). CNG is dispensed to DTC and BEST in their bus depots in many cases. New entrants could supply large CNG volumes to these customers by offering better prices. We estimate on the basis of disclosures by IGL and MGL in their presentations and earnings calls that CNG supplied to:

- DTC accounts for ~43% of IGL's CNG volumes
- BEST accounts for ~10% of MGL's CNG volumes

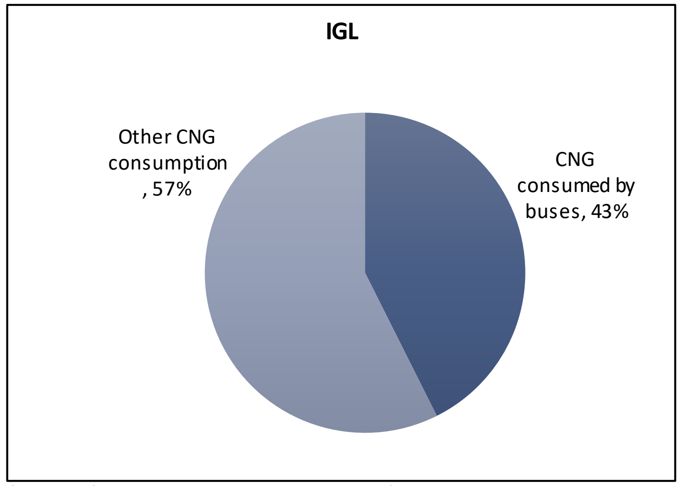
Thus, IGL appears more vulnerable to volume loss and margin decline than MGL if new entrants were to grab volumes from large customers like DTC and BEST.

Chart 27: BEST accounts for ~10% of MGL's CNG volumes



Source: Company data, Industry data, I-Sec research

Chart 28: DTC accounts for ~43% of IGL's CNG volumes



Source: Company data, Industry data, I-Sec research

Impact of competition to be gradual; faster if bulk customers targeted

Impact of competition on incumbents is likely to take some time and may be gradual as:

- Regulations notified are enabling in nature and actual allowing of competition would be done one by one in the geographical areas (GA) where exclusivity period is over. The fact that term of three of the four members of PNGRB expired in early-Dec'20, new members have not yet been appointed and there would be lack of quorum in the interim may delay the process of allowing competition.

- Competition is likely 141 days after common carrier declaration by PNGRB as per the process laid down in the regulation.

- Regulations do not allow OMCs to replace existing dispensers of incumbents with their own dispensers and whether they can install their own dispensers in addition to existing dispensers of incumbents is a grey area. Thus, OMCs may have to start dispensing CNG from petrol stations in which there are no CNG dispensers currently. This may be time consuming as last mile pipeline connectivity may also need to be established.

Impact of competition may be quicker if incumbents target large consumers like DTC and BEST.

Cheap gas supply can be cancelled if cost fall not passed on

GoI guideline of 3-Feb'14, when CNG and domestic PNG was given top priority for access to domestic gas, stated that any decline in domestic gas cost would have to be fully passed on to consumers. Another guideline issued by GoI on 18-Feb'14 stated that non-compliance with passing on the entire benefit of fall in gas cost would lead to cancellation of CGD players' domestic gas allocation for CNG and domestic PNG. This guideline was not implementable without hurting consumers when there was a monopoly. However, once competition is allowed, this provision to cancel supply of cheap domestic gas to players, who do not pass on gas cost fall, can be implemented.

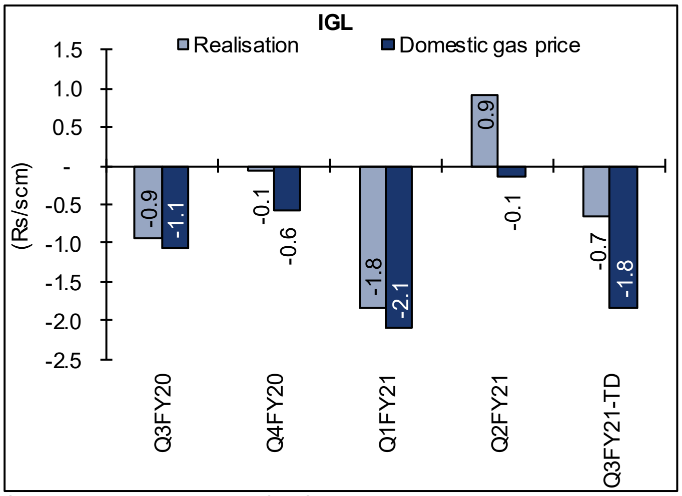
Thus, CGD players' EBITDA margin, which has seen secular rise in last few years, is likely to come under pressure with the advent of competition.

CGD players gained from not passing full benefit of gas cost fall

EBITDA margin of CGD players surged to record high in Q2FY21 as the full benefit of fall in gas cost was not passed on to the consumers. Gas cost fall was not passed on to consumers even in pre-Covid era (PMT gas price fall was not passed on from end-Dec'19 to Mar'20). Since Q2FY20 domestic gas cost is down by Rs5.7/scm but:

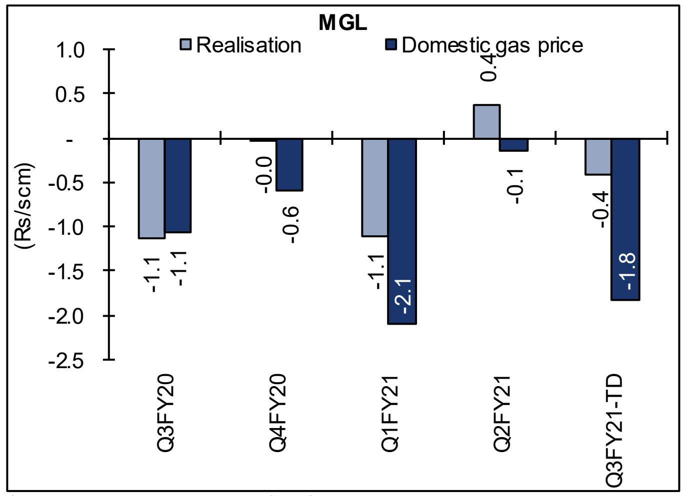
- IGL's CNG realisation is down by just Rs2.6/scm
- MGL's CNG realisation is down by just Rs2.3/scm

Chart 29: Gas cost down by Rs5.7/scm, but IGL's CNG realisation down Rs2.6/scm since Q2FY20



Source: Industry data, PPAC, I-Sec research

Chart 30: Gas cost down by Rs5.7/scm, but MGL's CNG realisation down Rs2.3/scm since Q2FY20



Source: Industry data, PPAC, I-Sec research

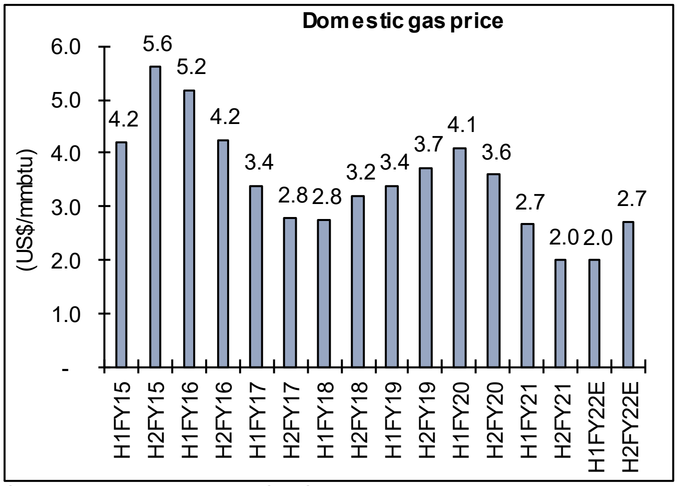
Domestic gas price at US$2.33/mmbtu in FY21; to be flat YoY in FY22E

Under the prevailing formula domestic gas price is linked to the US (Henry Hub), UK (NBP), Russia and Canada gas prices. Gas price as per this formula started at US$5.6/mmbtu in Nov'14 but since Apr'16 is consistently below US$4.2/mmbtu, which was the price of APM gas from Jun'10 to Oct'14. Gas price as per this formula collapsed to a new low of US$2.66/mmbtu in H1FY21 and is down further to just US$2/mmbtu in H2FY21. We estimate gas price as per this formula to be US$2/mmbtu even in H1FY22E, but to rise to US$2.72/mmbtu in H2FY22E thereby ensuring FY22E gas price at US$2.35/mmbtu is flat YoY.

Domestic gas price formula likely to be revised to boost prices

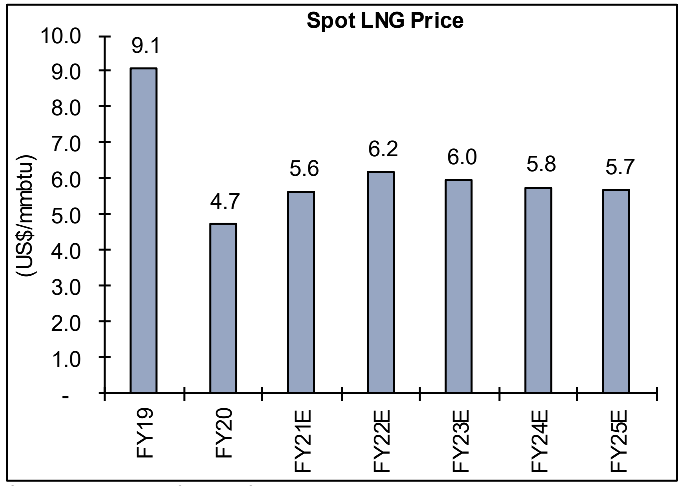
Breakeven cost of state-owned producers of gas from the nomination acreage (APM gas) is US$3.5-3.7/mmbtu and therefore there is urgency to revise the formula and introduce a floor price. A committee has been constituted by the petroleum ministry to propose revision of the current gas pricing formula. Under the revised formula domestic gas price may be linked to JKM spot LNG price and/or average of India's LNG import basket and Russia and Canada gas prices may be excluded from the formula. The gas price formula revision is likely latest from Apr'21, when the next price revision is due, though an earlier revision cannot be ruled out.

Chart 31: Domestic gas price at US$2.33/mmbtu in FY21; to be flat at US$2.35/mmbtu in FY22E



Source: Industry data, PPAC, I-Sec research

Chart 32: Spot LNG at US$5.7-6.2/mmbtu in FY22-25E higher than US$4.7-5.6/mmbtu in FY20-21E



Source: Reuters, CME, I-Sec research

Rise in gas prices likely to bring down CNG margins from lofty levels

EBITDA margin of IGL and MGL touched all-time high in Q2FY21. Margins are likely to rise further in Q3FY21E as entire benefit of fall in gas cost in Oct'20 has not been passed on to consumers and sharp QoQ recovery in CNG volumes is likely to mean further fall in opex and rise in EBITDA margins. Domestic gas price rise due to change in formula, whether done in Apr'21 or earlier, is likely to bring down the lofty margins of CGD players like IGL and MGL.

Spot LNG prices up sharply from lows; FY21E price to be up 19% YoY

JKM spot LNG prices, which had collapsed to US$4.7/mmbtu in FY20 and further to US$2.1-3.5/mmbtu in Q1-Q2FY21, have surged to US$7.0/mmbtu in Q3FY21-TD. It is estimated at US$7.9/mmbtu in Q3FY21E and US$9.0/mmbtu in Q4FY21E based on futures and is thus likely to ensure FY21E average at US$5.6/mmbtu is up 19% YoY.

JKM spot LNG futures at US$6.2-5.7/mmbtu in FY22E-FY25E

As per futures, JKM spot LNG is likely to rise to US$6.2/mmbtu in FY22E before declining to US$6.0/mmbtu in FY23E and to US$5.8-5.7/mmbtu in FY24E-FY25E. Spot LNG prices are likely to be driven by the fact that global LNG liquefaction capacity addition would be just 75mmt in CY20-CY25E *vs* 124mmt in CY16-CY19.

LNG surge may hurt CGD margins; fall post winter may bring gains

Higher and rising spot LNG prices may hurt margins of CGD players. However, the spike in winter followed by a correction to below US$6/mmbtu from May'21 may boost CGD players' margins in Q1FY22E if spike in Q4FY21 leads to domestic price hikes.

Prefer GGL among CGD players; reiterate **BUY** on GGL & GSPL

GGL to be less hit by competition; volume outlook better than peers

Among CGD players we prefer GGL as:

- It would be least hit by competition given its CNG volumes are smaller and spread over a much larger geographical area than IGL and MGL. In Morbi, potential competitor GAIL will find it difficult to compete given its high-priced long-term contracted LNG volumes *vs* GGL's cheaper spot LNG-dominated volumes.

- GGL is the best play on NGT / Court orders requiring polluting fuels to be replaced by gas as the areas it operates in are dominated by industrial volumes.

Strong volume growth likely for GGL driven by multiple factors

GGL's volumes are currently at over 10.5mmscmd with Morbi volumes at more than 6.5mmscmd. GGL's exit volumes in Dec'20 may well be 11mmscmd, which may rise to over 11mmscmd with Morbi at over 7mmscmd in Q4FY21E. GGL's FY22E volumes are likely to be 11.5-12mmscmd driven by:

- Growth in Morbi: 150 new ceramics units are planned in Morbi to meet surge in demand from exports.
- Growth from pharmaceutical and chemical units in South Gujarat, which may take up gas volumes from 1.9mmscmd now to 2.5mmscmd in FY22E.
- NGT order of Jul'20, which requires pollution control board to strictly enforce ban on use of furnace oil and petcoke as fuel. **This has the potential to drive GGL's volumes to well over 12mmscmd.**
- Volume growth in new GAs, which may boost volumes by 0.5mmscmd YoY in FY22E. 60% of volumes in new GAs are CNG and domestic PNG and only 40% industrial and commercial. 120 CNG stations are likely to be added in FY21E in new GAs in Madhya Pradesh, Rajasthan, Haryana and Punjab.

Upgrade EPS of CGD players & GSPL but no change in ratings

Raise GGL's FY21E-FY22E volume estimates by 4-14%

Our volume assumptions for GGL were very conservative and implied volumes of 10.2mmscmd in H2FY21E and 10.3mmscmd in FY22E. GGL's volumes are over 10.5mmscmd in Q3FY21-TD and it may well exit Q3FY21E at 11mmscmd and rise to over 11mmscmd in Q4FY21E. FY22E volumes are likely to be 11.5-12.0mmscmd and possibly higher if NGT order requiring strict implementation of ban on petcoke and furnace oil is implemented. We have therefore raised GGL's:

- FY21E volume estimates by 4% to 8.9mmscmd from 8.6mmscmd earlier implying volumes of 10.8mmscmd in H2FY21E
- FY22E volume estimates by 14% to 11.75mmscmd from 10.3mmscmd earlier

Withdrawal of Morbi discount and cheap KG D6 gas to boost margin

EBITDA margin is likely to decline sharply to just over Rs4/scm in Q3FY21E due to surge in spot LNG prices to US$6.6/mmbtu from US$3.5/mmbtu in Q2 and Rs2.5/scm discount offered to Morbi customers. EBITDA margin is likely to rebound in Q4FY21E as:

- The discount offered to Morbi consumers is withdrawn given the surge in spot LNG prices. Price for Morbi customers, which was Rs28.5/scm until May'20, was cut to Rs26.5/scm in early-Jun'20 and an additional discount of Rs2.5/scm was given from early-Sep'20 thereby bringing down effective price to Rs24/scm. This discount is likely to be withdrawn and even further price hike is not ruled out.

- Cheap KG D6 gas supply begins. Gas production is set to soon start from the 'R' series fields in the KG D6 block. GGL has contracted 0.6mmscmd of this volume at price, which is 8.5-8.6% of preceding three month's average Brent price. 'R' series gas price is likely to be just US$4.3/mmbtu, which is much lower than spot LNG prices.

Raise FY21E EBITDA margin by 4%, but cut FY22E estimate by 2%

We have:

- Raised FY21E EBITDA margin estimate by 4% to Rs5.7/scm from Rs5.5/scm earlier

- Cut FY22E EBITDA margin estimate by 2% to Rs5.25/scm from Rs5.36/scm earlier

Raise GGL's FY21E-FY22E EPS and target price by 9-27%

The net impact of increase in gas volume estimates and change in margin estimates is upgrade in:

- FY21E EPS by 9%

- FY22E EPS by 15%

- Target price by 27% to Rs442/share from Rs349/share earlier

We now estimate FY21E EPS to rise by 19% YoY and FY22E EPS by 25% YoY. Our revised target price implies 27% upside.

GGL top pick as volume growth strong & less impact from competition

GGL is our top pick among CGD players as:

- Strong volume growth will be driven by industrial volumes. We estimate GGL's volume growth at 32% YoY in FY22E (FY20-FY22E CAGR of 11.6%) and 11.4% YoY in FY23E driven by demand from ceramics (Morbi), chemical and pharma (south Gujarat) units and NGT order to strictly implement ban on polluting fuels.
- GGL is likely to be least impacted by competition as its CNG volumes are small but spread over a large geographical area and GAIL with its high-priced long-term LNG volumes will struggle to compete with it on gas to gas competition.

Raise IGL's FY21E-FY22E EPS and target price by 9-14%; retain SELL

IGL's management has indicated that CNG volumes in mid-Nov'20 are 90-95% of pre-lockdown levels *vs* 79% of year-ago levels in Q2FY21 and total volumes are back to pre-lockdown levels *vs* 84% of year-ago levels in Q2FY21. The sharp recovery in CNG volumes would mean further decline in opex and boost EBITDA margin. IGL cut its CNG prices by just Rs0.7/scm *vs* fall in domestic gas price by Rs1.8/scm in Q3FY21, which would further boost its EBITDA margin from an all-time high of Rs8/scm in Q2FY21. We have therefore raised IGL's EBITDA margin to Rs8/scm in FY21E *vs*

Rs7.3/scm earlier; this implies margin of Rs9/scm in H2FY21E. We have also raised FY22E EBITDA margin estimate to Rs7/scm from Rs6.5/scm earlier. The upgrade in margin has led to upgrade in:

- FY21E-FY22E EPS by 9% each
- Target price by 14% to Rs378/share from Rs333/share earlier

Competition is likely to lead to derating and margin fall. We believe IGL is more vulnerable to competition if new entrants target large consumers like DTC and also to derating given its lofty valuation. Revised target price implies 21% downside. Reiterate **SELL** on IGL.

Raise MGL's FY21-FY22E EPS & target price by 9-27%; retain REDUCE

MGL's management has indicated that CNG volumes in mid-Nov'20 are at 95% of pre-lockdown levels *vs* 58% of year-ago level in Q2FY21 and total volumes are back to pre-lockdown levels *vs* 69% of year-ago levels in Q2FY21. The sharp recovery in CNG volumes would mean further decline in opex and boost EBITDA margin. MGL cut its CNG prices by just Rs0.4/scm *vs* fall in domestic gas prices by Rs1.8/scm in Q3FY21, which would further boost its EBITDA margin from an all-time high of Rs11.6/scm in Q2FY21. We have therefore raised MGL's EBITDA margin to Rs12/scm in FY21E *vs* Rs10.5/scm earlier; this implies margin of Rs12.9/scm in H2FY21E. We have also raised FY22E EBITDA margin estimate to Rs9.7/scm from Rs9/scm earlier. In addition, we have raised FY21E volume estimate by 9% to 2.3mmscmd. The upgrade in volume and margins has led to upgrade in:

- FY21E EPS by 27%
- FY22E EPS by 9%
- Target price by 13% to Rs925/share from Rs817/share earlier

Competition is likely to lead to derating and margin fall. MGL is more vulnerable to margin contraction once competition kicks in. Revised target price implies 11% downside. We reiterate **REDUCE** on MGL.

Raise GSPL's EPS & target price to factor-in GGL upgrade; retain BUY

We have kept GSPL's standalone FY21E-FY22E EPS, which is based on transmission volume estimate of 39-40mmscmd, unchanged. However, factoring-in upgrade in GGL's FY21E-FY22E EPS has led to upgrade in GSPL's FY21E EPS by 4%, FY22E EPS by 9% and target price by 9% to Rs297/share (28% upside). Reiterate **BUY** on GSPL.

Cut PLNG's FY21E-22E EPS but raise target price; retain HOLD

We have cut PLNG's FY21E-FY22E EPS by 6%-2% mainly due to cut in other income estimate. However, we have raised target price by 6% to Rs256 (4% downside) mainly due to assuming higher Kochi terminal utilisation than earlier in the longer term. Reiterate **HOLD** on PLNG.

GAIL: Oil price surge improves earnings outlook

GAIL's H1FY21 EPS down 37% YoY as gas marketing in the red

Gas marketing EBITDA in the red in H1 hit by low oil & spot LNG prices

GAIL's H1FY21 consolidated EPS was down 37% YoY hit by gas marketing EBITDA in the red at minus Rs8.9bn *vs* Rs11.2bn in H1FY20. Lockdowns globally due to Covid globally hit oil and gas demand and led to plunge in oil and spot LNG prices. Sale of Henry Hub linked US LNG at low spot LNG prices and at oil-linked prices pushed gas marketing EBITDA in the red. We estimate loss on sale of Henry Hub linked US LNG:

- At spot LNG prices at US$4/mmbtu in Q1 and US$2.8/mmbtu in Q2FY21
- At oil price linked prices at US$0.8/mmbtu in Q1 and US$1.1/mmbtu in Q2FY21

Gas marketing may be in the black in H2 on oil & spot LNG surge

Announcement of multiple high-efficacy vaccines in Nov'20 has led to surge in oil prices from the lows in end-Oct'20. There has also been spike in spot LNG prices driven by temporary LNG liquefaction capacity outages, strong demand in Asia and Brazil, and transit delays for US cargoes to Asia through the Panama Canal. Weak US gas demand (mild winter) and high oil prices boosting US associated gas output has led to correction in Henry Hub prices, which also augurs well for GAIL's gas marketing outlook. The recovery in oil and spot LNG prices and fall in Henry Hub gas prices is likely to mean GAIL's gas marketing is back in the black in Q3 and Q4FY21.

Vaccine rollout to boost demand and ensure oil prices up YoY

Brent up 35% from end-Oct'20 lows due to Covid vaccines

Multiple high-efficacy vaccines against Covid were announced in Nov'20. Hopes that rollout of the vaccines would boost global oil demand have already driven up Brent by 35% from the lows of end-Oct'20 to ~US$50/bbl. Vaccinations have started in Britain, US and Canada. Vaccines are estimated to be widely available for most of the world except most of Africa, parts of Latin America, Asia and Middle East during Sep'21 to Mar-Jun'22.

Oil prices to be up YoY, but some headwinds to further rise near term

Hope that Covid vaccines would boost demand has led to surge in oil prices. However, the following factors may prices in the near term and some may also trigger price fall:

- Lockdowns in US and Europe due to second Covid wave, which has led to demand recovery reversal.
- Surge in Libya's oil output to 1.28m b/d from just 0.17m b/d in Sep'20.
- US oil rig count rise by 50% (86) from the lows of mid-Aug'20 and WTI at US$46.6/bbl suggests US oil output would rise further; US oil output is up 1.1m b/d from the lows of Apr'20.

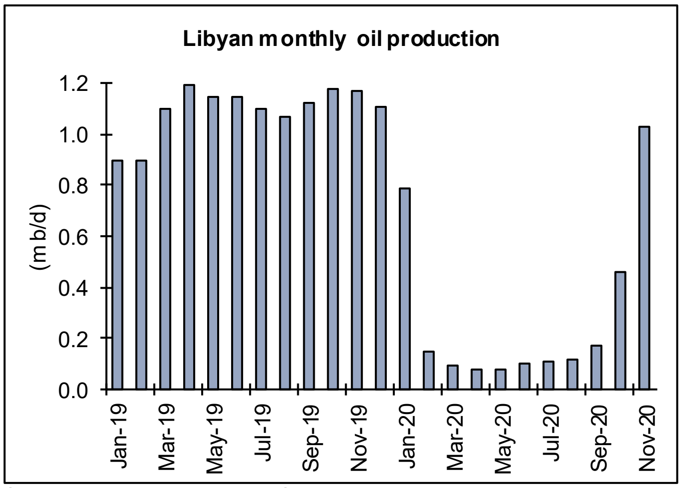
- Biden administration lifting US sanctions on Iran's oil exports, which could gradually boost Iran's output and exports by over 2m b/d.

We expect oil to be up YoY in CY21E and FY22E given the likely recovery in global oil demand as vaccinations are rolled out gradually.

Libyan output up to 1.28m b/d from low of 0.1m b/d in Apr-Jul'20

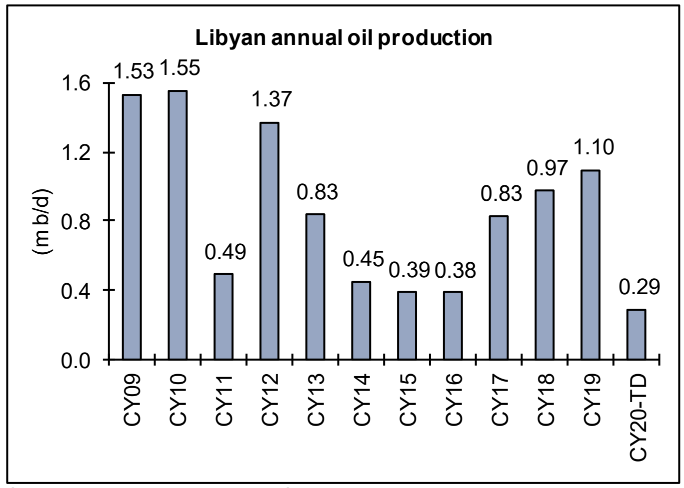
Libyan oil output, which plunged to a low of 0.1m b/d in Apr-Jul'20, has risen to 0.46m b/d in Oct'20 following ceasefire among warring factions and state-owned oil producer National Oil Company (NOC) lifting force majeure in oilfields one by one. Libyan oil output is believed to be over 1m b/d in Nov'20 and currently. Libya's NOC indicated that its production surged to 1.28m b/d on 14-Dec'20. Libyan oil output is just 0.29m b/d in CY20-TD up to Oct'20 and we estimate it at 0.38m b/d in CY21E. It is likely to be 3x higher at 1.2m b/d or above in CY21E.

Chart 33: Libyan oil output at 1.03m b/d in Nov'20 and 1.28m b/d now, up from 0.1m b/d in Jul'20



Source: Bloomberg, Argus, I-Sec research

Chart 34: CY20-TD Libyan output at 0.29m b/d lower than in other conflict years CY11 & CY14-16



Source: Bloomberg, Argus, I-Sec research

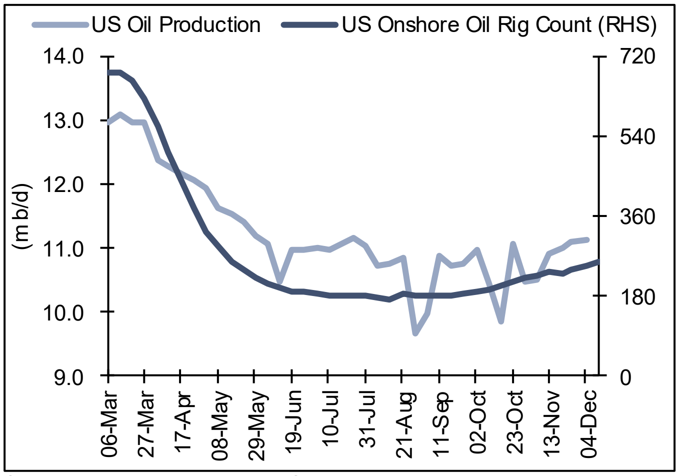
US output up 1.1m b/d from lows; shale output up 1m b/d

US oil output plunged by 2m b/d MoM to bottom out at 10.02m b/d in May'20 as Covid-driven lockdown led to a plunge in oil demand and prices. US oil output in Sep'20 as per EIA's more reliable monthly data is up 841k b/d at 10.86m b/d from low of 10m b/d in May'20. US oil output as per the less reliable weekly data at 11.1m b/d in the week ended 4-Dec'20 is up 1.1m b/d from lows. US shale output is up 955k b/d in Sep'20 at 7.14m b/d from low of 6.19m b/d in Apr'20. US shale and total output are still 1.1m-2m b/d below peak level respectively.

Rig count rise by 50% and oil prices by 35% to boost US oil output

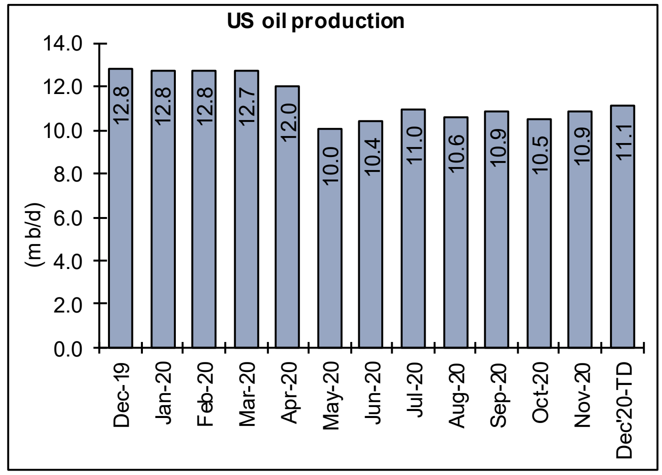
US onshore oil rig count declined by 75% (511) from 683 in mid-Mar'20 to 172 in mid-Aug'20 as oil prices were too low to support production increases. With oil prices recovering smartly and WTI rising to over US$40/bbl in Aug'20, US oil rig count started rising again in Aug'20. US oil rig count, which is a lead indicator of US oil output, is up 86 (50%) from lows in mid-Aug'20 to 258 in the week ended 11-Dec'20. The rise in rig count and recent surge in oil prices would allow producers to hedge at higher prices and boost output.

Chart 35: US oil output up 1.1m b/d from lows in May'20; US rig count up 50% from Aug'20 lows



Source: EIA, Baker Hughes, I-Sec research

Chart 36: US oil production bottomed out in May'20; up 1.1m b/d in Dec'20-TD from lows

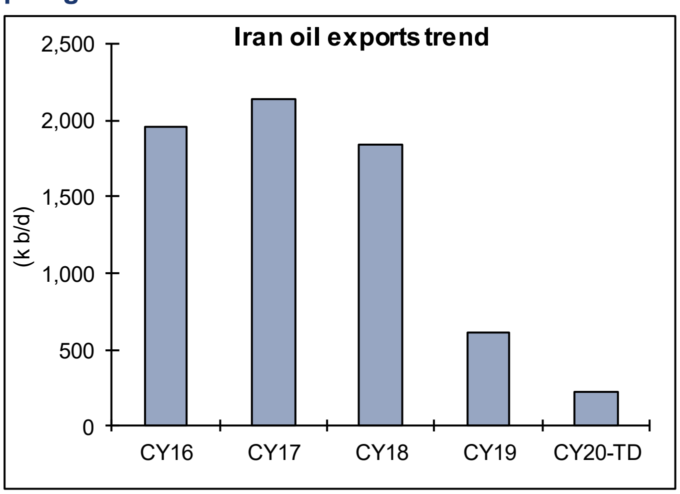


Source: EIA, I-Sec research

Removal of sanctions on Iran may sharply boost global oil supply

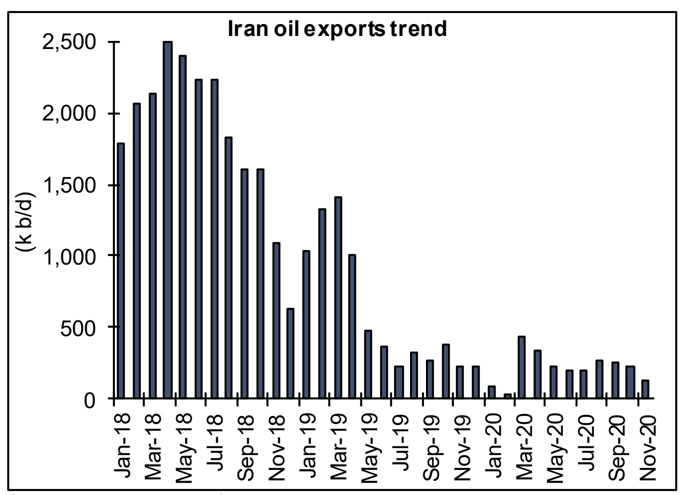
Iran's oil imports, which were at 2.5m b/d in Mar'18, have plunged to 0.13m b/d in Nov'20 following sanctions imposed by US in Nov'18 and strictly implemented from May'19. Iran exports stood at 0.6-1.4m b/d during Nov'18 to Apr'19 when waivers were granted to eight countries to gradually reduce imports from Iran. Since May'19 Iran's monthly oil exports have been at 34-484k b/d. US President-elect Biden has said he would return to the 2015 nuclear deal and lift sanctions if Iran returned to strict compliance with the nuclear deal. Press reports suggest Iran is planning to ramp up its oil production within three months in anticipation of removal of sanctions. Iran's export ramp up could add over 2m b/d to global supply thereby requiring OPEC+ to cut output by ~2m b/d or allow significant correction in oil price.

Chart 37: Iran exports at 1.8-2.1m b/d in CY16-18 plunged to 0.6-0.2m b/d in CY19 and CY20-TD



Source: Bloomberg, I-Sec research

Chart 38: Iran oil exports down from 2.5m b/d in Apr'18 to 0.13m b/d in Nov'20 due to US sanctions



Source: Bloomberg, I-Sec research

OPEC+ to gradually raise output – and after monthly deliberations

OPEC+ in its meeting on 3rd Dec'20 decided to adjust production by 0.5m b/d from 7.7m b/d to 7.2m b/d (*vs* 5.8m b/d decided in Apr'20 meeting). Furthermore, OPEC+ has decided to hold monthly meetings starting Jan'21 to assess market conditions and decide on further production adjustments for the subsequent month, with further monthly adjustments being not more than 0.5m b/d. This ensures supply deficit of 0.5m b/d in Q1CY21E (*vs* surplus of 0.4m b/d estimated earlier) even if OPEC+ raises production by 0.5m b/d every month starting Jan'21. OPEC+ production could thus rise by 1.9m b/d by Apr'21.

Supply deficit likely even in Q1CY21E on modest OPEC+ output rise

IEA estimates global oil supply deficit at 2.1-2.8m b/d in Q3-Q4CY20E. However, surplus of 0.4m b/d is likely in Q1CY21E if OPEC+, as agreed in Apr'20, prunes output cuts from 7.7m b/d to 5.8m b/d from Jan'21. However, OPEC+ has decided to raise output by just 0.5m b/d in Jan'21 and by not more than 0.5m b/d in later months – and that too only after deliberations. We now estimate supply deficit of 0.5m b/d in Q1CY21 and 0.2-2.8m b/d in Q2-Q4CY21E given the gradual rise in OPEC+ output.

Table 8: Global oil supply deficit in CY21 estimated at 1.4m b/d *vs* 0.5-2.6m b/d surplus in CY19-CY20E

m b/d	CY19	CY20E	CY21E
Non-OPEC	65.6	63.0	63.5
OPEC	34.9	30.9	32.1
Global supply	**100.6**	**93.9**	**95.6**
Global demand	**100.0**	**91.3**	**97.1**
Supply surplus/(deficit)	**0.5**	**2.6**	**(1.4)**
YoY change			
Non-OPEC		(2.7)	0.5
OPEC		(4.0)	1.3
Global supply		**(6.7)**	**1.7**
Global demand		**(8.8)**	**5.8**

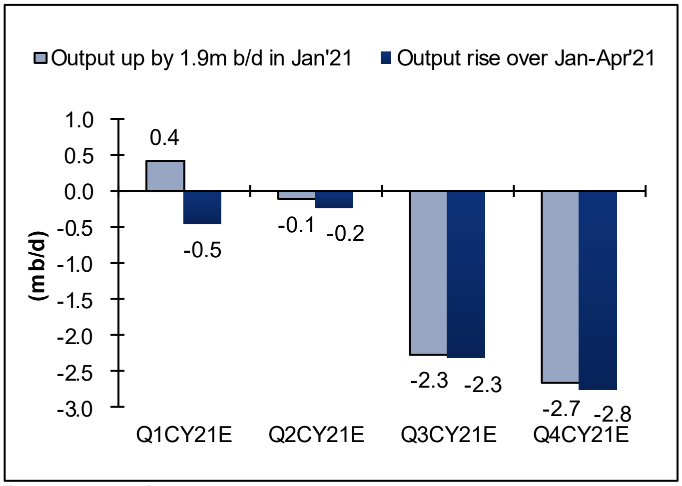
Source: IEA, I-Sec research

Supply deficit of 0.2-2.8m b/d in Q1-Q4CY21E as per IEA

Based on IEA demand and non-OPEC output estimates, we estimate global supply deficit in the four quarters of CY21E as follows:

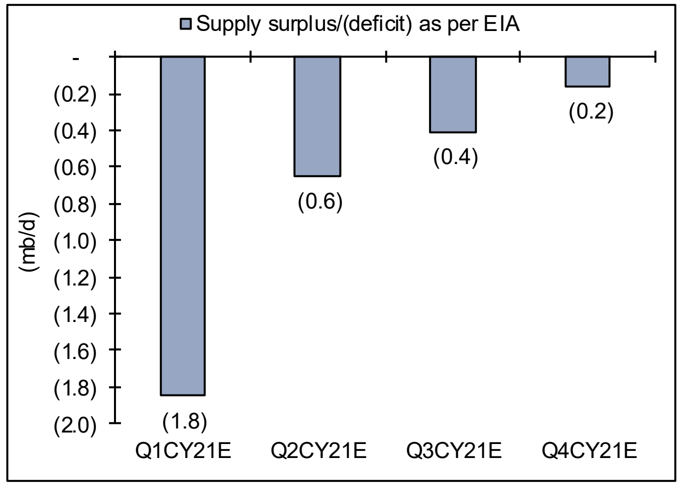
- 0.5m b/d in Q1CY21E
- 0.2m b/d in Q2CY21E
- 2.3m b/d in Q3CY21E
- 2.8m b/d in Q4CY21E

Chart 39: OPEC+ decision to raise output gradually to ensure global supply deficit even in Q1CY21E



Source: IEA, I-Sec research

Chart 40: Global oil supply deficit at 1.8-0.2m b/d in Q1-Q4CY21E as per EIA



Source: EIA, I-Sec research

Spot LNG prices in FY22-FY26 to be higher than in FY20-FY21

Recent spike in spot LNG due to short term demand-supply factors

Spot LNG prices have surged from US$2.1-3.5/mmbti in Q1-Q2FY21 to US$7.0/mmbtu in Q3FY21-TD and have currently spiked to US$11.1/mmbtu for Jan'21 delivery. Current spike in spot LNG prices is due to:

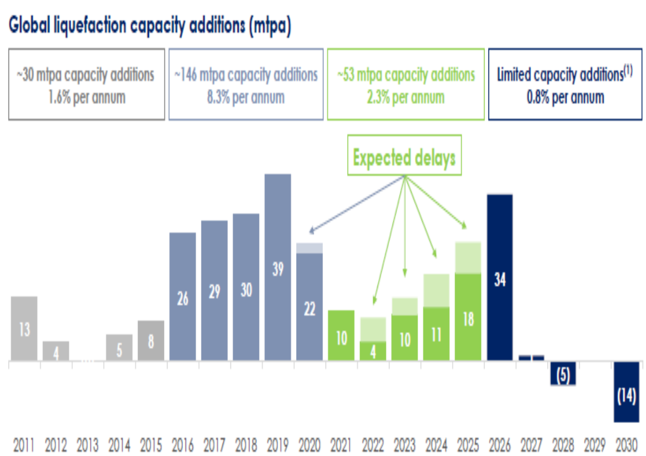
- Liquefaction capacity outages in Qatar, Australia and Malaysia. Gorgon LNG's 5.2mmtpa train has been shut for inspection in Oct'20. QatarGas' 7.8mmtpa capacity LNG train was shut for unplanned maintenance during 19-22nd Nov'20 and repair could take three weeks. Shell's Prelude 3.6mmtpa floating LNG plant, which was shut earlier in CY20, is likely to start operations only in Q1CY21.

- Strong demand in North-East Asia due to cold weather and in Brazil due to drought causing reduction in hydroelectric power generation and consequent rise LNG imports to generate power. Chinese LNG imports in Nov'20 are estimated to be the highest since Dec'19. South Korea's LNG demand is likely to be boosted by closure of nine to 16 of its 60 coal-fired power plants from Dec'20 to Feb'21 in an effort to limit air pollution.

- Transit delays at the Panama Canal for US LNG cargoes to Asia. These delays are caused by US LNG flows through the Panama Canal at record highs together with seasonal fog and added Covid safety procedures. Vessels that arrive without reservations are the ones, which have to wait for 10-15 days to pass through the Panama Canal. Longer waiting period at the Panama Canal and surging shipping rates for spot LNG cargoes are contributing to the spike in spot LNG prices.

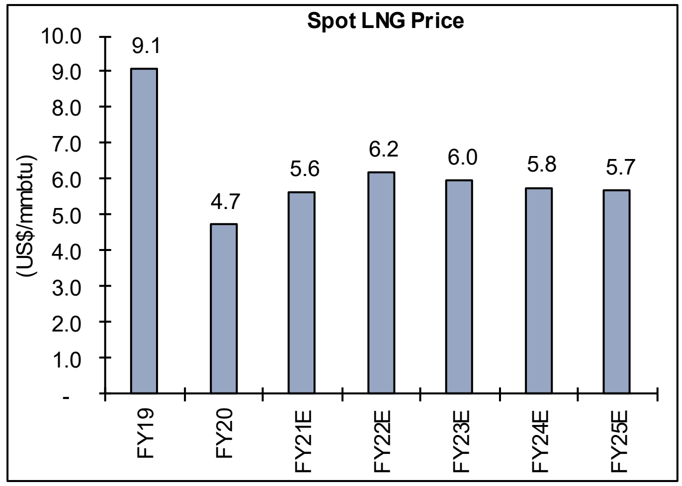
- Spike in oil prices. It is also probably supporting spot LNG prices.

Chart 41: LNG liquefaction capacity addition at just 75mmtpa in CY20-CY25E *vs* 124mmtpa in CY16-19



Source: Tellurian

Chart 42: Spot LNG at US$5.7-6.2/mmbtu in FY22-25E higher than US$4.7-5.6/mmbtu in FY20-21E



Source: Reuters, CME, I-Sec research

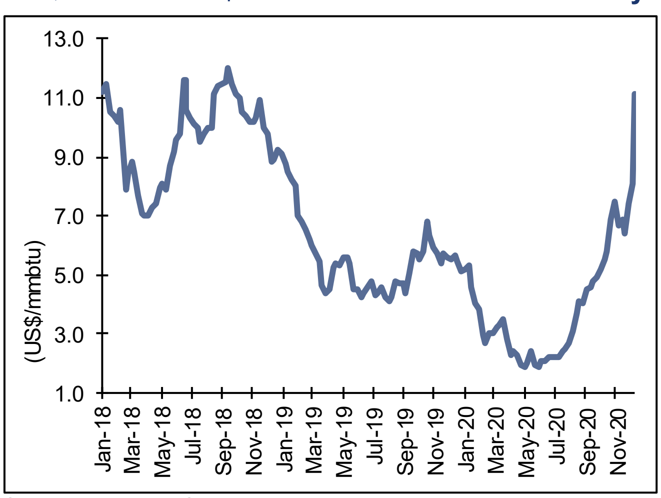
Spot LNG spike to be shortlived; futures < US$6/mmbtu in May-Oct'21

We expect the current spike to be shortlived as capacities in Qatar, Australia and Malaysia come back. US LNG exports had surged to 9.2 bcf/d in Nov'20, 11.2 bcf/d in 3-9 Dec'20 and touched an all-time high of 11.5 bcf/d on 5th Dec'20. Spot LNG futures peak at US$10.6/mmbtu in Feb'21 and are below US$6/mmbtu in May-Oct'21.

Spot LNG prices to be higher in FY22-FY26E than in FY20-FY21E

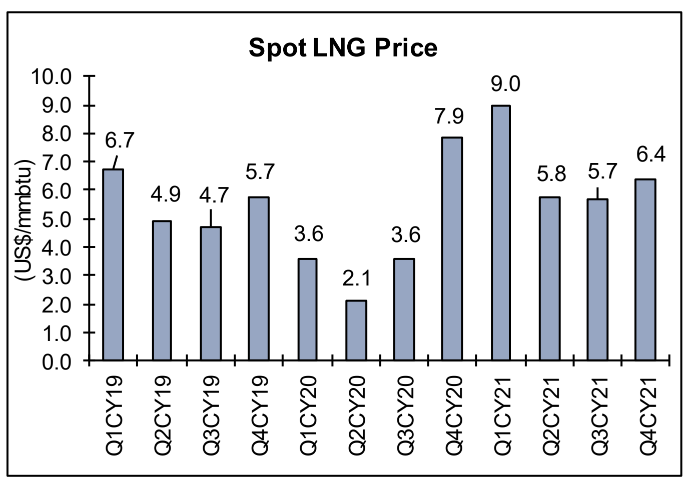
Modest liquefaction capacity additions – 75mmtpa in CY20-CY25E *vs* 124mmtpa in CY16-CY19 – will keep spot LNG prices higher in FY22-FY26E than US$4.7/mmbtu in FY20 and US$5.6/mmbtu in FY21E. Spot LNG futures are currently at US$6.2-6.0/mmbtu in FY22-FY23E, US$5.8/mmbtu in FY24E and US$5.7/mmbtu in FY25-FY26E.

Chart 43: Spot LNG prices up from US$2.1/mmbtu in Q1FY21 to US$11.1/mmbtu for Jan'21 delivery



Source: Reuters, I-Sec research

Chart 44: Spot LNG prices up from US$2.1/mmbtu in Q1FY21 to US$7.0/mmbtu in Q4CY20-TD



Source: Reuters, CME, I-Sec research

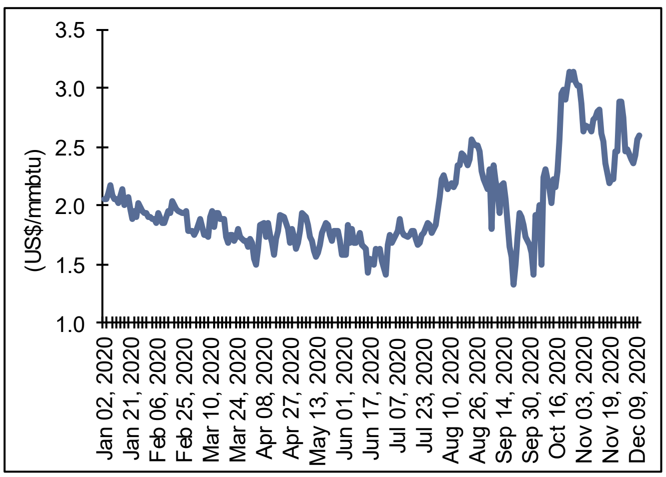
High oil prices boosting US wet gas output to pressure HH price

Henry Hub corrected on weak demand in Nov'20 and gas output surge

Henry Hub prices, which were briefly above US$3.0/mmbtu in late-Oct'20 and early-Nov'20, have corrected mainly due to:

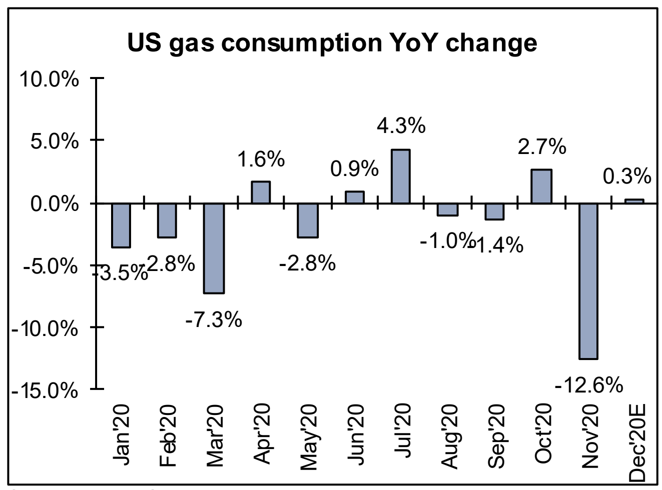
- Mild weather in the US resulting in Nov'20 gas consumption being down 13% YoY (steepest fall in CY20-TD).
- Rising associated gas production on the back of rising US oil production, oil prices and oil rig count. Vaccine news flow in Nov'20 boosted oil prices, which in turn boosted US oil rig count, US oil and associated gas production. Associated gas production is up from 7.7 bcf/d in Nov'20 to 11.5 bcf/d during 26th Nov'20 to 2nd Dec'20 and 11.2 bcf/d during 3-9th Dec'20.

Chart 45: Henry Hub corrected to US$2.6/mmbtu from recent high of US$3.14/mmbtu



Source: EIA, I-sec research

Chart 46: US gas consumption fall of 12.6% YoY in Nov'20 is steepest



Source: EIA, I-Sec research

HH futures for Q4FY21E, which were at US$3.4/mmbtu on 25-Sep'20, are at US$2.7/mmbtu now probably given the surge in WTI price, US oil rig count and consequently expected rise in US oil and associated gas production.

Table 9: Brent price up 25% while Henry Hub futures down 1-20% from levels of 26th Oct'20

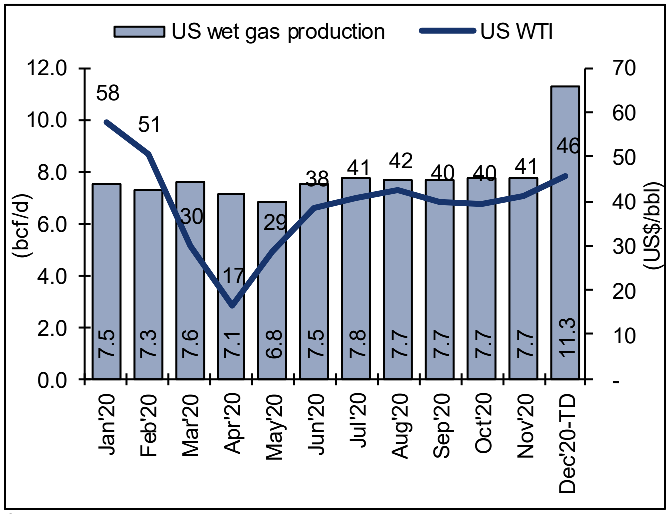
		Henry Hub futures for			
	Brent	Q4FY21E	FY22E	FY23E	FY24E
15-Dec'20	49.72	2.7	2.8	2.6	2.5
26-Oct'20	39.81	3.3	3.1	2.7	2.5
Change	25%	-20%	-7%	-4%	-1%

Source: Bloomberg, CME, I-Sec research

HH price at US$2.8-2.5/mmbtu in FY22-24E as vaccines boost oil prices

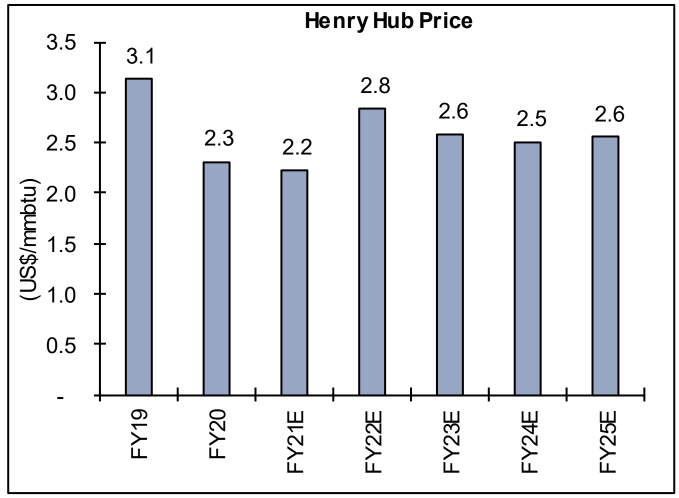
Vaccines boosting oil prices by 35% from lows on 30-Oct'20 has led to rise in US oil rig count, expectation of rise in US oil and associated gas production and consequently led to fall in Henry Hub gas prices and futures. HH gas price, which was at US$3.03/mmbtu on 30-Oct'20, is down to US$2.6/mmbtu on 15-Dec'20 while Brent, which was at US$36.9/bbl on 30-Oct'20, is up to US$49.72/bbl on 15-Dec'20. HH futures for Q4FY21E were at US$3.3/mmbtu and FY22-FY23E futures at US$3.1-2.7/mmbtu on 26-Oct'20 when Brent was at US$39.8/bbl. Now with Brent up at US$49.72/bbl, HH futures for Q4FY21E are down to US$2.7/mmbtu and for FY22-FY24E down to US$2.8-2.5/mmbtu. Thus, while Brent is up by 25% from levels on 26-Oct'20, HH futures for Q4FY21E and FY22-FY23E are down by 4-20%.

Chart 47: US wet gas production at a high of 11.3bcf/d in Dec'20-TD



Source: EIA, Bloomberg, I-sec Research

Chart 48: Henry Hub futures at US$2.8-2.5/mmbtu in FY22-FY25E as vaccines boost oil prices



Source: EIA, I-Sec research

Oil & spot LNG surge & HH fall improves gas marketing outlook

At futures prices, Q3-Q4 marketing EBITDA in the black at Rs3-6bn

Sharp recovery in oil and spot LNG prices and weakening of Henry Hub prices has improved GAIL's gas marketing EBITDA outlook for Q3-Q4FY21. Based on JKM spot LNG, HH and Brent prices and futures, we estimate sale of Henry Hub linked US LNG:

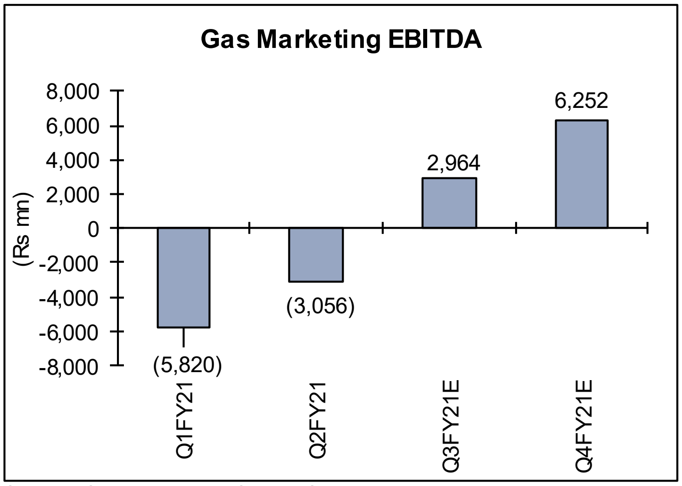
- At spot LNG prices would generate profit of US$1.2/mmbtu in Q3 and US$2.0/mmbtu in Q4 *vs* loss of US$2.8-4.0/mmbtu in Q1-Q2FY21
- At oil price linked prices would lead to a loss of US$1.0/mmbtu in Q3 and US$0.7/mmbtu in Q4FY21 *vs* loss of US$0.8-1.1/mmbtu

At futures prices, Q3-Q4 marketing EBITDA in the black at Rs3-6bn

At Brent, Henry Hub and JKM spot LNG futures prices, we estimate GAIL's gas marketing EBITDA to be:

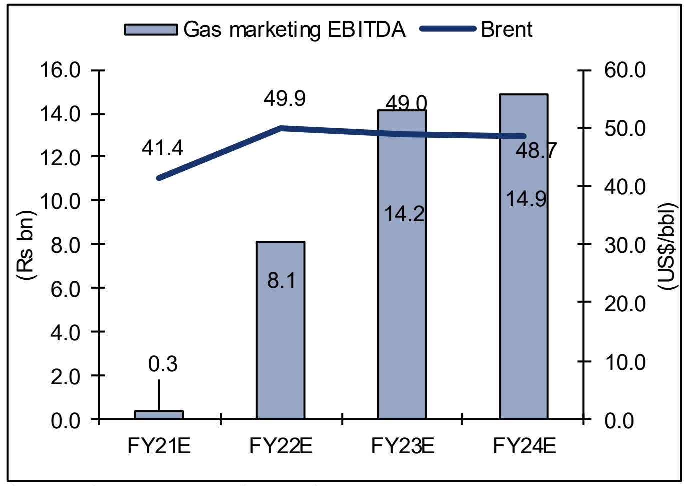
- In the black in Q3FY21 at Rs3.0bn. We estimate volumes sold at spot LNG prices at 9.4mmscmd and balance at oil linked prices.
- In the black in Q4FY21 at Rs6.3bn. We estimate volumes sold at spot LNG prices at 9.4mmscmd and balance at oil linked prices.
- In the black at Rs9.2bn in H2FY21E *vs* minus Rs8.9bn in H1FY21.
- In the black at Rs342mn in FY21E.

Chart 49: Gas marketing EBITDA estimated at Rs3bn-6bn in Q3-Q4 and Rs342mn in FY21E



Source: Company data, CME, I-Sec research

Chart 50: Gas marketing EBITDA at Rs8.1-14.9bn in FY22-FY24E at futures prices



Source: Company data, CME, I-Sec research

Gas marketing EBITDA at Rs8.1bn at futures prices in FY22E

At Brent futures prices of US$49.9/bbl and Henry Hub futures of US$2.8/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs8.1bn. We are estimating:

- Entire US LNG being sold at oil-linked prices.
- Loss on sale of US LNG at oil-linked prices at US$0.5/mmbtu.
- Loss on sale of US LNG oil-linked prices at Rs10.7bn.
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs18.7bn.

FY22E gas marketing EBITDA at Rs8.2-33.6bn at Brent of US$50-60/bbl

GAIL's gas marketing EBITDA will be in the red at minus Rs4.4bn with Brent at US$45/bbl, but will be in the black at Rs8.2-33.6bn if Henry Hub is US$2.8/mmbtu as in the base case but Brent is higher at US$50-60/bbl. Gas marketing EBITDA will be in the red with EBITDA loss of Rs17.1bn if Brent is at US$40/bbl.

Gas marketing EBITDA at Rs14.2bn at futures prices in FY23E

At Brent futures prices of US$49.0/bbl and Henry Hub futures of US$2.6/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs14.2bn. We are estimating:

- Entire US LNG being sold at oil-linked prices
- Loss on sale of US LNG at oil-linked prices at US$0.4/mmbtu
- Loss on sale of US LNG oil-linked prices at Rs7.9bn
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs22bn

Gas marketing EBITDA Rs17-42bn at Brent of US$50-60/bbl in FY23E

GAIL's gas marketing EBITDA would be higher at Rs16.6-41.9bn if Brent is higher at US$50-60/bbl. Gas marketing EBITDA would be lower than base case at Rs4.0bn if Brent is at US$45/bbl.

Table 10: Gas marketing EBITDA to be Rs8.2-43.6bn at Brent of US$50-60/bbl and at Henry Hub of US$2.8-2.5/mmbtu in FY22-FY24E

Rs bn	Brent Price (US$/bbl)					
	Base case	40	45	50	55	60
GAIL's gas marketing EBITDA in						
FY22E (Futures at US$49.9/bbl)	8.1	(17.1)	(4.4)	8.2	20.9	33.6
FY23E (Futures at US$49.0/bbl)	14.2	(8.7)	4.0	16.6	29.3	41.9
FY24E (Futures at US$48.7/bbl)	14.9	(7.1)	5.6	18.3	30.9	43.6

Source: CME, I-Sec research

Gas marketing EBITDA at Rs14.9bn at futures prices in FY24E

- At Brent futures prices of US$48.7/bbl and Henry Hub futures of US$2.5/mmbtu, we estimate GAIL's gas marketing EBITDA at Rs14.9bn. We are estimating:
- Entire US LNG being sold at oil-linked prices
- Loss on sale of US LNG at oil-linked prices at US$0.3/mmbtu
- Loss on sale of US LNG at oil-linked prices at Rs6.7bn
- Marketing margin and trading profit on sale of domestic gas, RasGas, Gorgon and Gazprom LNG at Rs21.5bn

Gas marketing EBITDA Rs18-44bn at Brent of US$50-60/bbl in FY24E

- GAIL's gas marketing EBITDA would be higher at Rs18.3-43.6bn if Brent is higher at US$50-60/bbl. Gas marketing EBITDA would be lower than base case at Rs5.6bn if Brent is at US$45/bbl.

FY22E EPS to be up 17% YoY driven by higher oil prices

Raise FY21-22 EPS by 42-18% and target price by 43%; reiterate HOLD

Our earlier estimates of GAIL's gas marketing EBITDA were based on price and futures as on 10-Nov'20. Factoring-in the surge in oil, spot LNG and fall in HH prices and futures has meant we estimate GAIL's gas marketing EBITDA at:

- Rs3bn in Q3FY21 *vs* earlier estimate of loss of Rs0.7bn
- Rs6.3bn in Q4FY21 *vs* earlier estimate of loss of Rs5.3bn
- Rs9.2bn in H2FY21 *vs* earlier estimate of loss of Rs6bn
- Rs342mn in FY21 *vs* earlier estimate of minus Rs14.9bn

Thus, we now estimate gas marketing EBITDA of Rs342mn in FY21 *vs* loss of Rs14.9bn earlier. FY22E gas marketing EBITDA based on HH futures and assuming Brent at US$50/bbl (futures at US$49.9/bbl) is 65% higher than earlier estimate at Rs8.2bn. This upgrade in gas marketing EBITDA is the main driver of upgrade in:

- FY21E EPS by 42%
- FY22E EPS by 18%
- Target price by 43% to Rs129/share (3% upside). The upgrade in target price is also driven by rise in value of investments to Rs50/share from Rs44/share earlier. It is based on DCF valuation of gas and LPG transmission segment and 5x gas marketing EV/EBITDA, 6x LPG-petrochemicals EV/EBITDA and 15x FY22E of unlisted CGD subsidiaries

GAIL: Oil price recovery has improved earnings outlook; retain HOLD

Recent spike in oil and spot LNG prices and fall in HH gas prices has improved outlook of GAIL's gas marketing, which was its Achilles heel in H1FY21. Vaccine rollout boosting global oil demand is likely to mean oil price is higher YoY in FY22E/CY21E. Higher oil prices are likely to boost US oil and associated gas output, which in turn would lead to fall in HH gas price. Low LNG liquefaction capacity addition and demand recovery is likely to mean spot LNG prices are up YoY in CY21E/FY22E. Futures of Brent, spot LNG and HH suggest current trend is set to continue, which augurs well for GAIL's gas marketing and earnings outlook in Q4FY21 and FY22-FY23E. Reiterate **HOLD** on GAIL.

FY21E EPS down 37% YoY, but FY22E EPS up 17% YoY

We expect GAIL's FY21E EPS to be down 37% YoY, hit mainly by gas marketing EBITDA at just Rs342mn *vs* Rs22.7bn in FY20. We estimate FY22E EPS to be up 17% YoY driven by:

- Gas marketing EBITDA at Rs8.2bn *vs* just Rs342mn in FY21E
- Gas transmission EBITDA at Rs46.4bn *vs* Rs43.8bn in FY21E. Transmission volumes are estimated to rise to 110mmscmd from 104mmscmd in FY21E. Kochi-Mangalore and Jagdishpur-Haldia-Bokaro-Dhamra pipeline is likely to ramp up in FY22E.
- LPG production EBITDA at Rs14.3bn *vs* Rs13bn in FY21E. Higher oil prices of US$50/bbl would drive this growth.

FY20-FY22E EPS CAGR is estimated at minus 14%.

IOC: GRM recovery may be key to stock price rise

Share price down 24% despite 117% YoY rise in H1FY21 EPS

H1 EPS up 117% YoY driven by marketing margin & inventory gain

IOCs' H1FY21 EPS is up 117% YoY on a low base driven by:

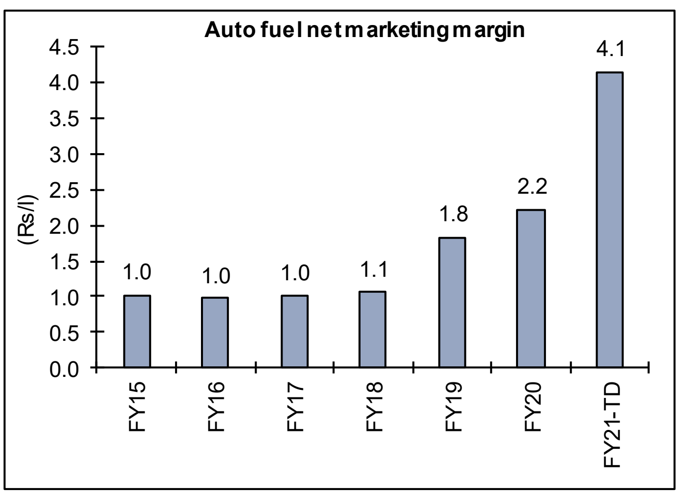
- 2.2x YoY surge in auto fuel net marketing margins to Rs4.43/l
- Crude and product inventory gain at Rs42.0bn *vs* gain of just Rs550mn in H1FY20

The rise in H1 EPS was despite 51% YoY fall in core GRM, 23% YoY fall in sales volume and throughput. IOC's H1FY21 core EPS (excluding inventory gain) is up 36% YoY though the rise is much more modest than in reported EPS.

Auto fuel net margin at Rs4.14/l in FY21-TD; FY21E at Rs3.3/l

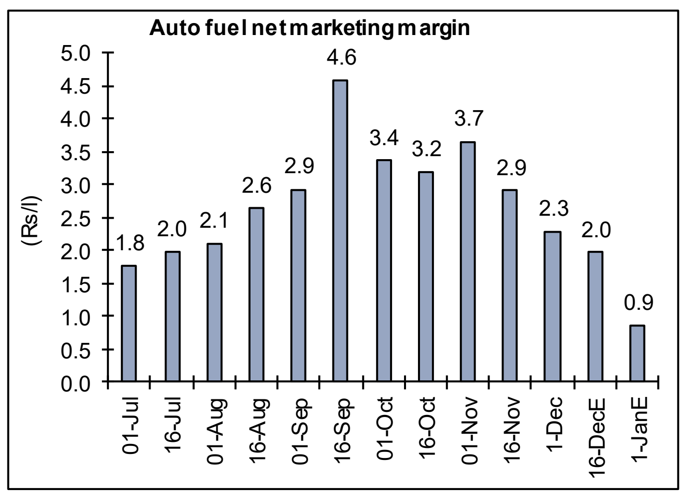
Auto fuel net marketing margin is at Rs4.14/l in FY21-TD, Rs3.35/l in Q3FY21-TD and Rs3.47/l on 15-Dec'20. Net margin is estimated to be up 50% YoY to Rs3.3/l in FY21E; it was Rs0.97-1.6/l in FY15-FY18 but surged to Rs1.83-2.22/l in FY19-FY20. Auto fuel net marketing margins are being kept at extraordinarily high levels to make up for the extreme weakness in GRMs and ensure that integrated refining and marketing margins are at levels enough to justify OMCs refining and selling petroleum products. IOC's CFO had indicated in an interview that lofty auto fuel marketing margins would continue as long as GRMs are weak.

Chart 51: Auto fuel net marketing margin at Rs4.14/l in FY21-TD *vs* Rs2.22/l in FY20



Source: PPAC, Reuters, I-Sec research

Chart 52: Net margin at Rs3.47/l on 15-Dec'20, Rs1.97/l on 16-Dec'20 and Rs0.87/l at latest prices



Source: PPAC, Reuters, I-Sec research

More hikes required and likely; net margin Rs0.87/l on 1-Jan if no hikes

Surge in international auto fuel prices is likely to mean net margin falls to Rs1.97/l on 16-Dec'20 when the refinery transfer price is revised based on international prices in the previous fortnight. At latest international prices, net margin would slip to Rs0.87/l on 1-Jan'21 if no further retail price hikes are made. Net margin needs to be Rs2/l or higher in Q4FY21E for FY21E net margin to be Rs3.3/l or higher. Until now in FY21-TD, retail price hikes have been made whenever net margin appears likely to slip below Rs2/l. Further price hikes before 1-Jan'21 to boost margin therefore appear likely.

Poor stock performance may be due to weak GRMs

However, despite strong earnings growth in H1 and even stronger earnings growth outlook in FY21E, IOC's share price is down 24% in CY20-TD. IOC is the worst performing stock in Indian oil & gas despite its H1 EPS rise being one of the highest. We believe IOC's poor stock performance may be due to GRMs being extremely low and investors not being confident of lofty auto fuel net marketing margins in FY21-TD sustaining. Thus, recovery in GRM may be key to improvement in IOC's stock performance.

Vaccine-driven demand rise and refinery closure to boost GRMs

GRMs to be up YoY as vaccines boost demand and capacity is shut

Recovery in global oil demand, decline in bloated product inventories and closure of refineries to reduce refining overcapacity are key to GRM recovery. We expect GRM to be up YoY in CY21E/FY22E driven by:

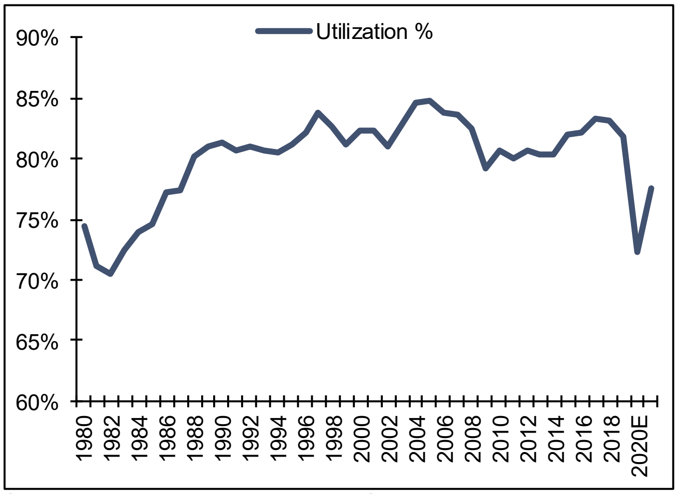
- Gradual vaccine rollout globally, which is expected to help boost global oil demand. IEA estimates global oil demand, which is down 8.8m b/d YoY in CY20E, to be up 5.8m b/d YoY in CY21E. US EIA's estimates of global oil demand fall in CY20E and recovery on CY21E are very similar to that of IEA.

- Decline in US gasoline and diesel inventories. They are up 6% from recent lows, but are down 10-16% from highs in CY20-TD. As global demand gradually rises, it may help further whittle down global product inventories.

- Permanent closure of refining capacity, which helps boost global refinery utilisation to 77.6% in CY21E from 38-year low of 72.4% in CY20E. We estimate permanent closure of 1.5m b/d refining capacity globally in CY20-CY21E. Permanent closure of another 1.4m b/d of capacity is under consideration.

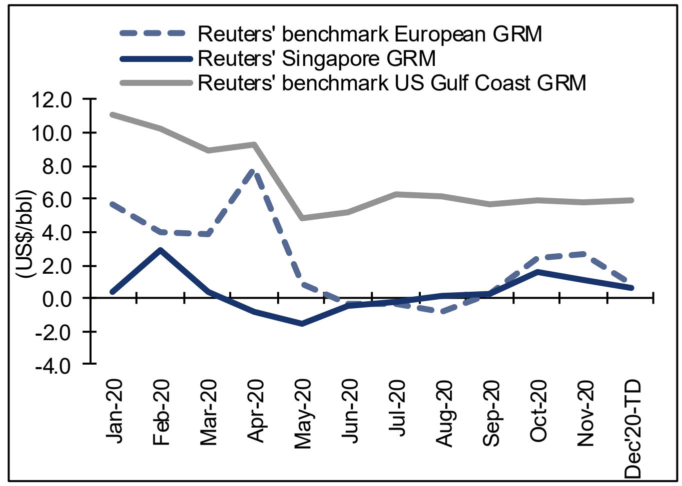
- Jet fuel and diesel cracks are showing signs of recovery – they are up from US$1.0-2.5/bbl in Oct'20 to US$3.6-4.4/bbl in Dec'20-TD driven by sharp decline in US distillate inventory and recovery in Indian diesel demand close to pre-lockdown levels.

Chart 53: Global refinery utilisation to rise to 77.6% in CY21E from 38-year low of 72.4% in CY20E



Source: EIA, IEA, Wood Mackenzie, I-Sec research

Chart 54: Benchmark GRMs across regions down sharply from Mar-Apr after Covid-19 hit globally



Source: Reuters, I-Sec research

Permanent closure of 1.5m b/d of capacity likely in CY20-CY21E

GRMs in CY20E are hit by decline in global refinery utilisation to 73%, which is the lowest level in 37 years due to steep decline in global demand. Low GRMs and fall in demand is making it unviable for refineries to operate as a result of which 1.5m b/d refining capacity in US, Japan, Philippines, Finland and France may be shut in CY20-21 out of which 0.4m b/d capacity would be converted for biodiesel. Moreover, potential closure of another 1.4m b/d refining capacity in Europe, Australia, New Zealand and Philippines is under consideration.

Table 11: 1.5m b/d refining capacity may be shut in CY20-21; closure of another 1.4m b/d possible

Refinery	Country	Capacity (k b/d)
Refinery shutdowns		
Royal Dutch Shell	Philippines	110
Royal Dutch Shell	Louisiana, USA	240
Marathon Petroleum	USA	161
Marathon Petroleum	USA	26
Neste	Finland	58
JXTG	Japan	115
BP	Kwinana, Australia	146
Irving Oil	Newfoundland	135
PBF	Paulsboro, NJ	85
Sub-total		**1,076**
Shutdown and conversion to biodiesel		
Holly Frontier	USA	48
Neste	Finland	240
Total	France	101
Sub-total		**389**
Total refinery closures		**1,465**
Potential Closures		
Gunvor Group	Belgium	110
BP	Netherlands	377
Petroineos	UK	200
Viva	Australia	120
New Zealand refining NZ	New Zealand	135
Petron	Philippines	180
Phillips 66	Santa Maria, CA, USA	44.5
Calcasieu Refining	Lake Charles, LA	136
Phillips 66	Rodeo, CA, USA	120
Phillips 66	USA	19
Sub-total		**1,441**
Total closures and potential closures		**2,906**

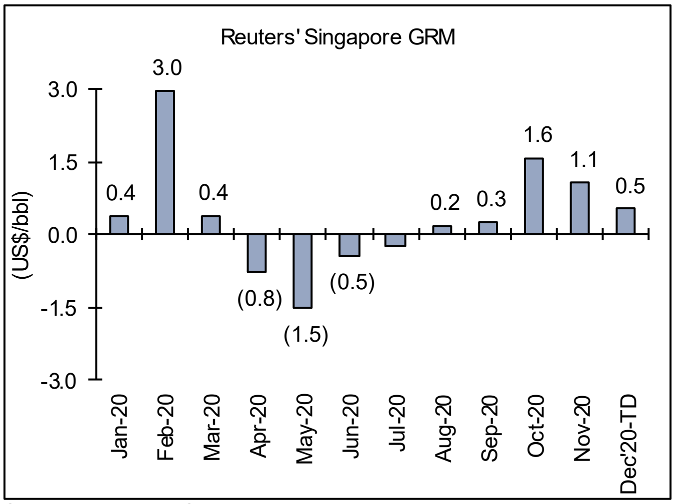
Source: Industry data, I-Sec research

GRM remains weak, hit by second Covid wave in US and Europe

Singapore GRM in Dec'20-TD down 67% from Oct'20 highs

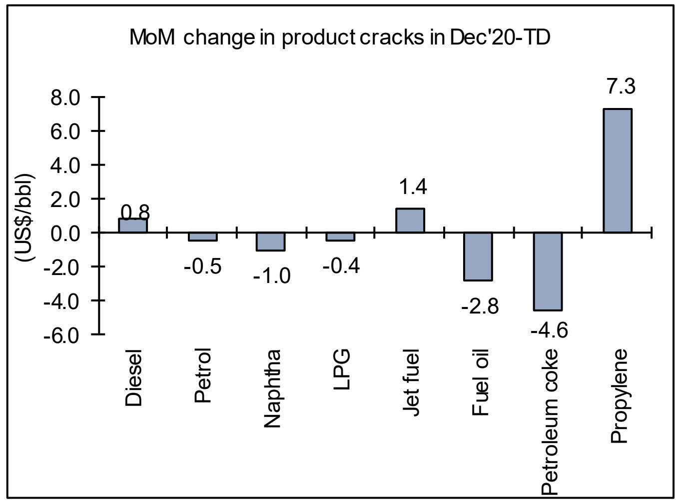
Reuters' Singapore GRM hit an 8-month high of US$1.57/bbl in Oct'20 driven by the gradual recovery in global demand and decline in US gasoline inventory from highs in Apr'20. However, Singapore GRM at US$0.52/bbl in Dec'20-TD is down 67% from levels in Oct'20 due to fall in all product cracks except diesel and jet fuel.

Chart 55: Singapore GRM down to US$0.5/bbl in Dec'20-TD from 8-month high in Oct'20



Source: Reuters, I-Sec research

Chart 56: Diesel, jet fuel and propylene cracks up MoM in Dec'20-TD

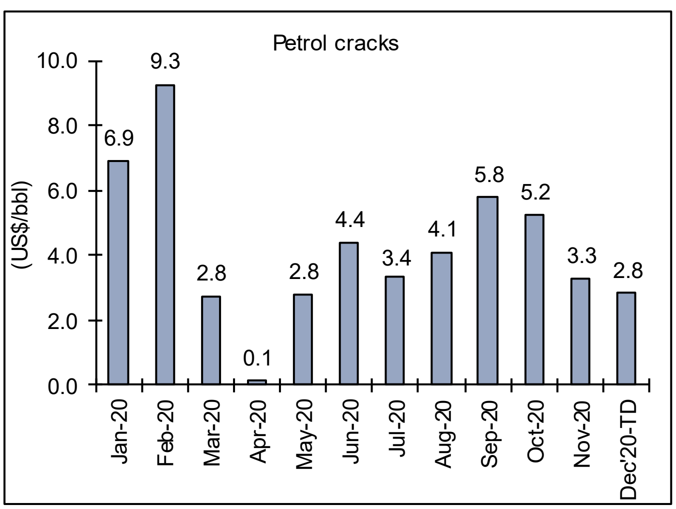


Source: Reuters, I-Sec research

Petrol cracks at 7-month low of US$2.8/bbl in Dec'20-TD

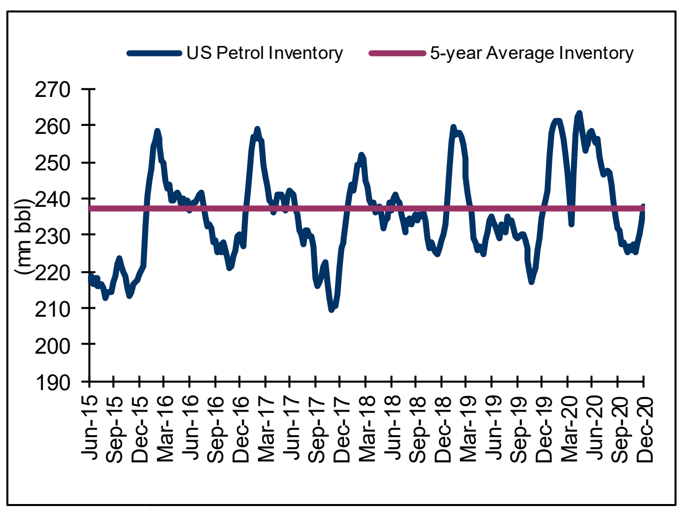
- Petrol cracks touched 8-month high of US$5.8/bbl in Sep'20, but are now down sharply to 7-month low of US$2.8/bbl in Dec'20-TD.

Chart 57: Petrol cracks lowest since May'20 at US$2.8/bbl in Dec'20-TD



Source: Reuters, I-Sec research

Chart 58: US gasoline inventory at 0.2% above 5-year average



Source: EIA, I-Sec research

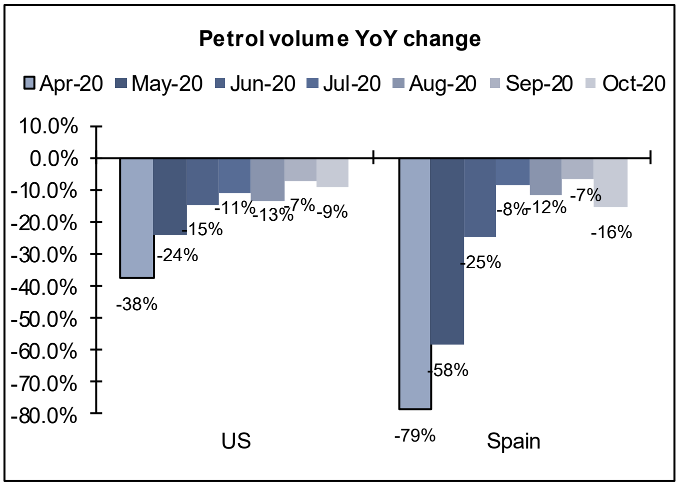
GRMs hit as second Covid wave in US and Europe hit demand

The announcements of high-efficacy vaccines against Covid boosted oil prices but not GRMs. Second wave of Covid and resultant lockdowns appear to have hit demand in the US and Europe and hurt GRMs as is apparent from:

- US gasoline consumption fall is steeper at 14.4% YoY in the first week of Dec'20 and 9.9% YoY in Nov'20 *vs* 7.1-9.0% YoY fall in Sep-Oct'20

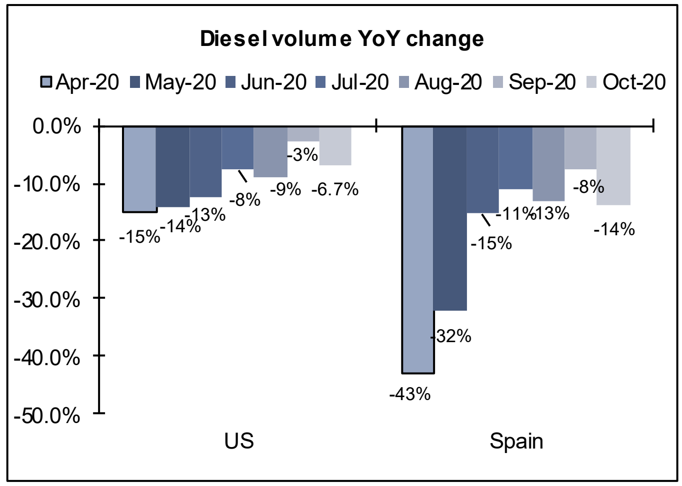
- In Spain diesel and gasoline consumption decline was steeper at 13.7-15.6% YoY in Oct'20 *vs* 7.7-6.6% YoY in Sep'20

Chart 59: US and Spain petrol consumption down 9.3-15.6% YoY in Oct'20 *vs* 7.1-6.6% YoY in Sep'20



Source: EIA, CLH, I-Sec research

Chart 60: US and Spain diesel consumption fall steeper in Oct'20 than in Sep'20



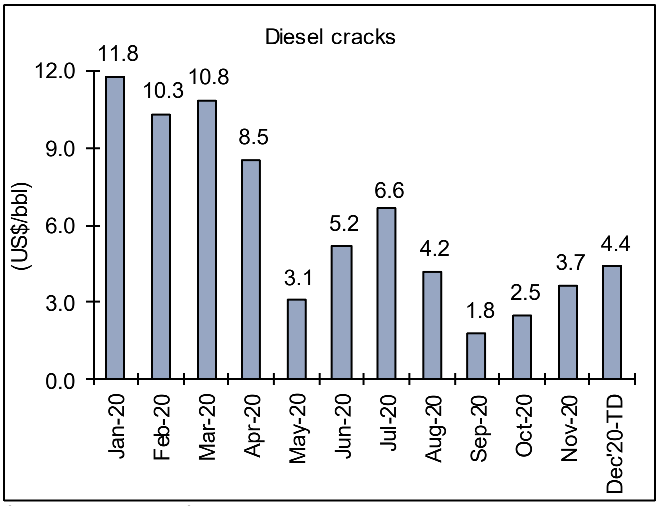
Source: EIA, CLH, I-Sec research

Diesel and jet fuel cracks up as US inventory and refinery yields fall

Diesel cracks hit a low of US$1.8/bbl in Sep'20, but have since recovered to US$4.4/bbl in Dec'20-TD. Diesel cracks are up 46% MoM in Nov'20 at US$3.7/bbl and 21% MoM in Dec'20-TD at US$4.4/bbl. Recovery in diesel cracks has been driven by:

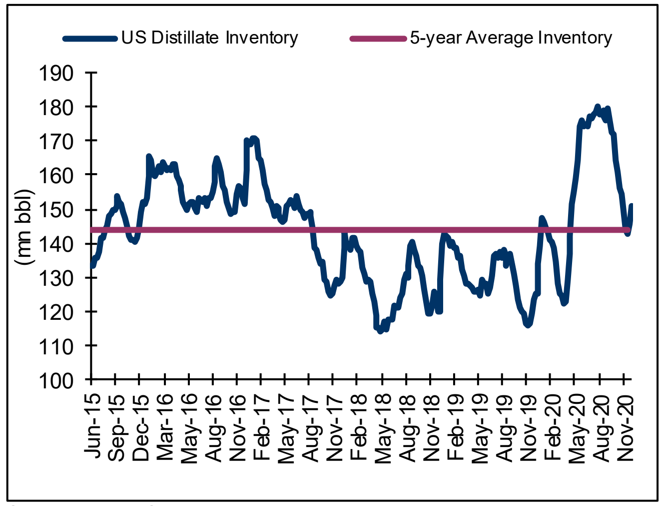
- Decline in US distillate inventory by 16% from a 37-year high in end-Jul'20. US distillate inventory had fallen below 5-year average briefly in mid-Nov'20, but is now 5% above that level.
- Recovery in diesel consumption in India and US: Indian diesel consumption was up 7.5% YoY in Oct'20 but on the low base of 7.3% YoY fall in Oct'19. Diesel consumption in Nov'20 was down 6.9% YoY but on the high base of 9% YoY rise in Nov'19. 2-year consumption CAGR was at 0.7% in Nov'20 *vs* minus 0.2% in Oct'20. US diesel consumption decline at 3.3% YoY in Nov'20 was more modest than the 6.7% YoY in Oct'20, but steeper than the 2.6% YoY in Sep'20.
- US distillate yield, which surged to 36% in Apr'20, was back to year-ago level of 26.2% in Nov'20.

Chart 61: Diesel cracks are at US$2.5-4.4/bbl in Oct-Dec'20-TD from a low of US$1.8/bbl in Sep'20



Source: Reuters, I-Sec research

Chart 62: US distillate inventory down 16% from recent high; now 5.2% above 5-year average



Source: EIA, I-Sec research

Raise FY21-FY22E EPS and target price; retain **ADD**

Raise IOC's FY21E EPS by 22% mainly due to higher inventory gains

We have raised IOC's FY21 EPS estimate by 22% mainly due to raising:

- Product inventory gain to Rs28.6n from Rs14.7bn earlier. We have now factored-in product inventory gain of Rs13.9bn estimated in Q3FY21-TD.
- Standalone crude inventory gain to US$1/bbl from US$0.4/bbl earlier.
- Subsidiary CPCL's GRM estimate to US$6.7/bbl from US$5/bbl earlier. This upgrade is mainly to factor-in the crude inventory gain estimated in Q3.

Raise IOC's FY22E EPS by 12% mainly due to assuming higher GRM

We have raised IOC's FY22 EPS estimate by 12% mainly due to raising GRM estimate of CPCL to US$2.5/bbl from US$1.4/bbl earlier.

Raise target price by 21% to Rs105, based on 6x FY22E EV/EBITDA

Our target price is now based on 6x FY22E core EBIDTA *vs* on FY21E core EBITDA earlier. This has meant upgrade in target price by 21% to Rs105/share (12% upside).

FY21E EPS up 203% YoY boosted by marketing and inventory gains

We estimate IOC's FY21E EPS to be up 203% YoY driven by:

- 50% YoY rise in auto fuel net marketing margin to Rs3.3/l
- Product inventory gain of Rs28.6bn *vs* loss of Rs66.9bn in FY20
- Reported standalone GRM of US$2.45/bbl *vs* just US$0.14/bbl in FY20
- Subsidiary CPCL's net profit of Rs6.6bn *vs* loss of Rs14.7bn in FY20

FY22E reported EPS down 8% YoY, but core EPS up 31% YoY

IOC's core FY22E EPS to be up 31% YoY, but reported down 8%

We estimate IOC's FY22E reported EPS to be down 8% YoY. We are assuming:

- Rise in reported GRM to US$3.4/bbl from US$2.45/bbl in FY21E. Core GRM is estimated to be US$1.45/bbl in FY21E and US$3.4/bbl in FY22E.
- 22% YoY rise in crude throughput to 69mmt.
- Decline in auto fuel net marketing margin to Rs2.5/l from Rs3.3/l in FY21E. We are assuming that once GRMs recover, there would be decline in auto fuel marketing margins from the lofty levels of FY21E. IOC's CFO had indicated in an interview that supernormal auto fuel marketing margins would continue as long as GRMs are weak so as to ensure integrated refining and marketing margin are at reasonable levels to justify producing and selling refined products.
- 12.7% YoY rise in domestic sales volumes to 98.25mmt.

However, core FY22E EPS (excluding inventory gain) would be up 31% YoY compared with FY21E core EPS (excluding crude and product inventory gain) of ~Rs80bn.

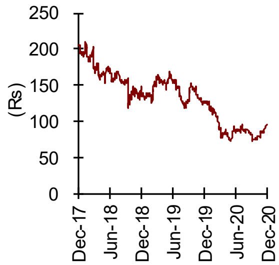
GRM recovery key to IOC's stock performance; vaccines to help

IOC's poor stock performance in CY20-TD may be due to GRM being at record lows as global oil demand led to global refinery utilisation declining to a 38-year low of 72.4% in CY20. Significant recovery in GRM appears to be key to improvement in IOC's stock performance. Recovery in global oil demand by 5.8m b/d due to rollout of vaccines and decline in refining capacity by 1m b/d in CY21E (impact of 1.5m b/d capacity refinery closure in CY20-21E) is likely to boost global refinery utilisation to 77.6% in CY21E. We expect the rise in global refinery utilisation to boost IOC's core GRM from US$1.45/bbl in FY21E to US$3.4/bbl in FY22E.

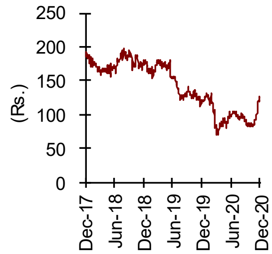
We reiterate **ADD** on IOC, which is trading at an attractive 0.83-0.77x FY21E-FY22E P/BV and at dividend yield of 7.5%.

Price charts

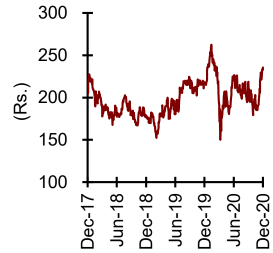
IOCL



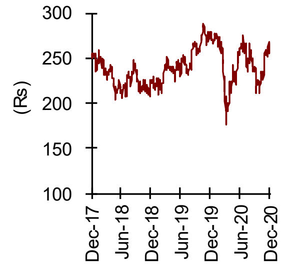
GAIL



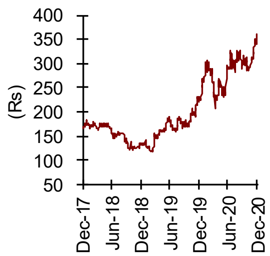
GSPL



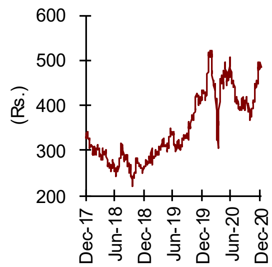
PLNG



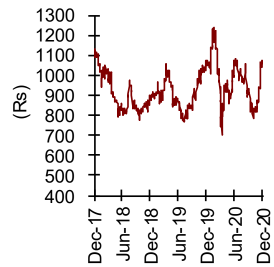
Gujarat Gas



IGL



MGL



Source: Bloomberg

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